

&lt;400&gt; 3216

Met His Val Phe Ile Val Gly Met Ser Leu Ser Ser Val Thr Leu Ala  
 1 5 10 15  
 Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu Ile Trp  
 20 25 30  
 Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu Arg Asn  
 35 40 45  
 Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu Ser Ala  
 50 55 60  
 Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu Ala Ala  
 65 70 75 80  
 Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp Glu Gln  
 85 90 95  
 Pro Asp Ala Ser Gln Pro Leu Gln Leu Cys Glu Pro Leu His Ser Ile  
 100 105 110  
 Leu Leu Thr Met Cys Glu Asp Gln Pro His Arg Arg Cys Thr Leu Gln  
 115 120 125  
 Ser Val Leu Glu Ala Cys Arg Val His Glu Lys Glu Val Ser Val Tyr  
 130 135 140  
 Pro Ala Pro Ala Gly Leu His Ile Arg Arg Leu Val Gly Leu Val Leu  
 145 150 155 160  
 Gly Thr Ile Ser Glu Val Glu Lys Arg Val Val Glu Glu Ser Ser Ser  
 165 170 175  
 Val Gln Gln Asn Arg Ser Tyr Leu Leu Arg Lys Arg Leu Arg Gly Thr  
 180 185 190  
 Ser Ser Glu Ser Pro Ala Ala Gln Ala Pro Glu Cys Leu His Pro Cys  
 195 200 205  
 Arg Val Ser Glu Arg Ser Thr Glu Thr Gln Ser Ser Pro Glu Pro His  
 210 215 220  
 Trp Ser Thr Leu Thr His Ser His Cys Ser Leu Leu Val Asn Arg Ala  
 225 230 235 240  
 Leu Pro Gly Ala Asp Pro Gln Asp Gln Gln Ala Gly Arg Arg Leu Ser  
 245 250 255  
 Ser Gly Ser Val His Ser Ala Ala Asp Ser Ser Trp Pro Thr Thr Pro  
 260 265 270  
 Ser Gln Arg Gly Phe Leu Gln Arg Arg Ser Lys Phe Ser Arg Pro Glu

275	280	285
Phe Ile Leu Leu Ala Gly Glu	Ala Pro Met Thr Leu His Leu Pro Gly	
290	295	300
Ser Val Val Thr Lys Lys Gly Lys Ser Tyr Leu Ala Leu Arg Asp Leu		
305	310	315
Cys Val Val Leu Leu Asn Gly Gln His Leu Glu Val Lys Cys Asp Val		
325	330	335
Glu Ser Thr Val Gly Ala Val Phe Asn Ala Val Thr Ser Phe Ala Asn		
340	345	350
Leu Glu Glu Leu Thr Tyr Phe Gly Leu Ala Tyr Met Lys Ser Lys Glu		
355	360	365
Phe Phe Phe Leu Asp Ser Glu Thr Arg Leu Cys Lys Ile Ala Pro Glu		
370	375	380
Gly Trp Arg Glu Gln Pro Gln Lys Thr Ser Met Asn Thr Phe Thr Leu		
385	390	395
Phe Leu Arg Ile Lys Phe Phe Val Ser His Tyr Gly Leu Leu Gln His		
405	410	415
Ser Leu Thr Arg His Gln Phe Tyr Leu Gln Leu Arg Lys Asp Ile Leu		
420	425	430
Glu Glu Arg Leu Tyr Cys Asn Glu Glu Ile Leu Leu Gln Leu Gly Val		
435	440	445
Leu Ala Leu Gln Ala Glu Phe Gly Asn Tyr Pro Lys Glu Val Glu Ser		
450	455	460
Lys Pro Tyr Phe His Val Glu Asp Tyr Ile Pro Ala Ser Leu Ile Glu		
465	470	475
Arg Met Thr Ala Leu Arg Val Gln Val Glu Val Ser Glu Met His Arg		
485	490	495
Leu Ser Ser Ala Leu Trp Gly Glu Asp Ala Glu Leu Glu Phe Leu Arg		
500	505	510
Val Thr Gln Gln Leu Pro Glu Tyr Gly Val Leu Val His Gln Val Phe		
515	520	525
Ser Glu Lys Arg Arg Pro Glu Glu Glu Met Ala Leu Gly Ile Cys Ala		
530	535	540
Lys Gly Val Ile Val Tyr Glu Val Lys Asn Asn Ser Arg Ile Ala Met		
545	550	555
Leu Arg Phe Gln Trp Arg Glu Thr Gly Lys Ile Ser Thr Tyr Gln Lys		

565	570	575
Lys Phe Thr Ile Thr Ser Ser Val Thr Gly Lys Lys His Thr Phe Val		
580	585	590
Thr Asp Ser Ala Lys Thr Ser Lys Tyr Leu Leu Asp Leu Cys Ser Ala		
595	600	605
Gln His Gly Phe Asn Ala Gln Met Gly Ser Gly Gln Pro Ser His Val		
610	615	620
Leu Phe Asp His Asp Lys Phe Val Gln Met Ala Asn Leu Ser Pro Ala		
625	630	635
His Gln Ala Arg Ser Lys Pro Leu Ile Trp Ile Gln Arg Leu Ser Cys		
645	650	655
Ser Glu Asn Glu Leu Phe Val Ser Arg Leu Gln Gly Ala Ala Gly Gly		
660	665	670
Leu Leu Ser Thr Ser Met Asp Asn Phe Asn Val Asp Gly Ser Lys Glu		
675	680	685
Ala Gly Ala Glu Gly Ile Gly Arg Ser Pro Cys Thr Gly Arg Glu Gln		
690	695	700
Leu Lys Ser Ala Cys Val Ile Gln Lys Pro Met Thr Trp Asp Ser Leu		
705	710	715
Ser Gly Pro Pro Val Gln Ser Met His Ala Gly Ser Lys Asn Asn Arg		
725	730	735
Arg Lys Ser Phe Ile Ala Glu Pro Gly Arg Glu Ile Val Arg Val Thr		
740	745	750
Leu Lys Arg Asp Pro His Arg Gly Phe Gly Phe Val Ile Asn Glu Gly		
755	760	765
Glu Tyr Ser Gly Gln Ala Asp Pro Gly Ile Phe Ile Ser Ser Ile Ile		
770	775	780
Pro Gly Gly Pro Ala Glu Lys Ala Lys Thr Ile Lys Pro Gly Gly Gln		
785	790	795
Ile Leu Ala Leu Asn His Ile Ser Leu Glu Gly Phe Thr Phe Asn Met		
805	810	815
Ala Val Arg Met Ile Gln Asn Ser Pro Asp Asn Ile Glu Leu Ile Ile		
820	825	830
Ser Gln Ser Lys Gly Val Gly Gly Asn Asn Pro Asp Glu Glu Lys Asn		
835	840	845
Gly Thr Ala Asn Ser Gly Val Ser Ser Thr Asp Ile Leu Ser Phe Gly		

850	855	860	
Tyr Gln Gly Ser Leu	Ser Ser His Thr	Gln Asp Gln Asp Arg Asn Thr	
865	870	875	880
Glu Glu Leu Asp Met	Ala Gly Val Gln Ser	Leu Val Pro Arg Leu Arg	
885	890	895	
His Gln Leu Ser Phe	Leu Pro Leu Lys Gly	Ala Gly Ser Ser Cys Pro	
900	905	910	
Pro Ser Pro Pro Glu	Ile Ser Ala Gly Glu	Ile Tyr Phe Val Glu Leu	
915	920	925	
Val Lys Glu Asp Gly	Thr Leu Gly Phe Ser	Val Thr Gly Gly Ile Asn	
930	935	940	
Thr Ser Val Pro Tyr	Gly Gly Ile Tyr Val	Lys Ser Ile Val Pro Gly	
945	950	955	960
Gly Pro Ala Ala Lys	Glu Gly Gln Ile Leu	Gln Gly Asp Arg Leu Leu	
965	970	975	
Gln Val Asp Gly Val	Ile Leu Cys Gly Leu	Thr His Lys Gln Ala Val	
980	985	990	
Gln Cys Leu Lys Gly	Pro Gly Gln Val Ala	Arg Leu Val Leu Glu Arg	
995	1000	1005	
Arg Val Pro Arg Ser	Thr Gln Gln Cys Pro	Ser Ala Asn Asp Ser Met	
1010	1015	1020	
Gly Asp Glu Arg Thr	Ala Val Ser Leu Val	Thr Ala Leu Pro Gly Arg	
1025	1030	1035	1040
Pro Ser Ser Cys Val	Ser Val Thr Asp Gly	Pro Lys Phe Glu Val Lys	
1045	1050	1055	
Leu Lys Lys Asn Ala	Asn Gly Leu Gly Phe	Ser Phe Val Gln Met Glu	
1060	1065	1070	
Lys Glu Ser Cys Ser	His Leu Lys Ser Asp	Leu Val Arg Ile Lys Arg	
1075	1080	1085	
Leu Phe Pro Gly Gln	Pro Ala Glu Glu Asn	Gly Ala Ile Ala Ala Gly	
1090	1095	1100	
Asp Ile Ile Leu Ala	Val Asn Gly Arg Ser	Thr Glu Gly Leu Ile Phe	
1105	1110	1115	1120
Gln Glu Val Leu His	Leu Leu Arg Gly Ala	Pro Gln Glu Val Thr Leu	
1125	1130	1135	
Leu Leu Cys Arg Pro	Pro Pro Gly Ala Leu	Pro Glu Met Glu Gln Glu	



1140 1145 1150  
 Trp Gln Thr Pro Glu Leu Ser Ala Asp Lys Glu Phe Thr Arg Ala Thr  
 1155 1160 1165  
 Cys Thr Asp Ser Cys Thr Ser Pro Ile Leu Asp Gln Glu Asp Ser Trp  
 1170 1175 1180  
 Arg Asp Ser Ala Ser Pro Asp Ala Gly Glu Gly Leu Gly Leu Arg Pro  
 1185 1190 1195 1200  
 Glu Ser Ser Gln Lys Ala Ile Arg Glu Ala Gln Trp Gly Gln Asn Arg  
 1205 1210 1215  
 Glu Arg Pro Trp Ala Ser Ser Leu Thr His Ser Pro Glu Ser His Pro  
 1220 1225 1230  
  
 His Leu Cys Lys Leu His Gln Glu Arg Asp Glu Ser Thr Leu Ala Thr  
 1235 1240 1245  
 Ser Leu Glu Lys Asp Val Arg Gln Asn Cys Tyr Ser Val Cys Asp Ile  
 1250 1255 1260  
 Met Arg Leu Gly Arg Tyr Ser Phe Ser Ser Pro Leu Thr Arg Leu Ser  
 1265 1270 1275 1280  
 Thr Asp Ile Phe

<210> 3217

<211> 971

<212> PRT

<213> Homo sapiens

<400> 3217

Met Gly Val Ala Gly Arg Asn Arg Pro Gly Ala Ala Trp Ala Val Leu  
 1 5 10 15  
 Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Leu Leu Ala Gly Ala Val  
 20 25 30  
 Pro Pro Gly Arg Gly Arg Ala Ala Gly Pro Gln Glu Asp Val Asp Glu  
 35 40 45  
 Cys Ala Gln Gly Leu Asp Asp Cys His Ala Asp Ala Leu Cys Gln Asn  
 50 55 60

Thr	Pro	Thr	Ser	Tyr	Lys	Cys	Ser	Cys	Lys	Pro	Gly	Tyr	Gln	Gly	Glu
65					70					75					80
Gly	Arg	Gln	Cys	Glu	Asp	Ile	Asp	Glu	Cys	Gly	Asn	Glu	Leu	Asn	Gly
				85						90					95
Gly	Cys	Val	His	Asp	Cys	Leu	Asn	Ile	Pro	Gly	Asn	Tyr	Arg	Cys	Thr
			100						105					110	
Cys	Phe	Asp	Gly	Phe	Met	Leu	Ala	His	Asp	Gly	His	Asn	Cys	Leu	Asp
		115						120					125		
Val	Asp	Glu	Cys	Leu	Glu	Asn	Asn	Gly	Gly	Cys	Gln	His	Thr	Cys	Val
	130						135					140			
Asn	Val	Met	Gly	Ser	Tyr	Glu	Cys	Cys	Cys	Lys	Glu	Gly	Phe	Phe	Leu
145					150					155					160
Ser	Asp	Asn	Gln	His	Thr	Cys	Ile	His	Arg	Ser	Glu	Glu	Gly	Leu	Ser
				165						170					175
Cys	Met	Asn	Lys	Asp	His	Gly	Cys	Ser	His	Ile	Cys	Lys	Glu	Ala	Pro
			180						185					190	
Arg	Gly	Ser	Val	Ala	Cys	Glu	Cys	Arg	Pro	Gly	Phe	Glu	Leu	Ala	Lys
		195						200					205		
Asn	Gln	Arg	Asp	Cys	Ile	Leu	Thr	Cys	Asn	His	Gly	Asn	Gly	Gly	Cys
	210					215						220			
Gln	His	Ser	Cys	Asp	Asp	Thr	Ala	Asp	Gly	Pro	Glu	Cys	Ser	Cys	His
225					230					235					240
Pro	Gln	Tyr	Lys	Met	His	Thr	Asp	Gly	Arg	Ser	Cys	Leu	Glu	Arg	Glu
				245						250					255
Asp	Thr	Val	Leu	Glu	Val	Thr	Glu	Ser	Asn	Thr	Thr	Ser	Val	Val	Asp
		260							265					270	
Gly	Asp	Lys	Arg	Val	Lys	Arg	Arg	Leu	Leu	Met	Glu	Thr	Cys	Ala	Val
		275					280						285		
Asn	Asn	Gly	Gly	Cys	Asp	Arg	Thr	Cys	Lys	Asp	Thr	Ser	Thr	Gly	Val
	290						295						300		
His	Cys	Ser	Cys	Pro	Val	Gly	Phe	Thr	Leu	Gln	Leu	Asp	Gly	Lys	Thr
305					310					315					320
Cys	Lys	Asp	Ile	Asp	Glu	Cys	Gln	Thr	Arg	Asn	Gly	Gly	Cys	Asp	His
				325						330					335
Phe	Cys	Lys	Asn	Ile	Val	Gly	Ser	Phe	Asp	Cys	Gly	Cys	Lys	Lys	Gly

340	345	350
Phe Lys Leu Leu Thr Asp Glu Lys Ser Cys Gln Asp Val Asp Glu Cys		
355	360	365
Ser Leu Asp Arg Thr Cys Asp His Ser Cys Ile Asn His Pro Gly Thr		
370	375	380
Phe Ala Cys Ala Cys Asn Arg Gly Tyr Thr Leu Tyr Gly Phe Thr His		
385	390	395
Cys Gly Asp Thr Asn Glu Cys Ser Ile Asn Asn Gly Gly Cys Gln Gln		
405	410	415
Val Cys Val Asn Thr Val Gly Ser Tyr Glu Cys Gln Cys His Pro Gly		
420	425	430
Tyr Lys Leu His Trp Asn Lys Lys Asp Cys Val Glu Val Lys Gly Leu		
435	440	445
Leu Pro Thr Ser Val Ser Pro Arg Val Ser Leu His Cys Gly Lys Ser		
450	455	460
Gly Gly Gly Asp Gly Cys Phe Leu Arg Cys His Ser Gly Ile His Leu		
465	470	475
Ser Ser Gly Leu Gln Gly Ala Tyr Ser Val Thr Cys Gly Ser Ser Ser		
485	490	495
Pro Leu Arg Asn Lys Gln Gln Lys Ser Asn Asp Ser Ala Phe Gly Asp		
500	505	510
Val Thr Thr Ile Arg Thr Ser Val Thr Phe Lys Leu Asn Glu Gly Lys		
515	520	525
Cys Ser Leu Lys Asn Ala Glu Leu Phe Pro Glu Gly Leu Arg Pro Ala		
530	535	540
Leu Pro Glu Lys His Ser Ser Val Lys Glu Ser Phe Arg Tyr Val Asn		
545	550	555
Leu Thr Cys Ser Ser Gly Lys Gln Val Pro Gly Ala Pro Gly Arg Pro		
565	570	575
Ser Thr Pro Lys Glu Met Phe Ile Thr Val Glu Phe Glu Leu Glu Thr		
580	585	590
Asn Gln Lys Glu Val Thr Ala Ser Cys Asp Leu Ser Cys Ile Val Lys		
595	600	605
Arg Thr Glu Lys Arg Leu Arg Lys Ala Ile Arg Met Leu Arg Lys Ala		
610	615	620
Val His Arg Glu Gln Phe His Leu Gln Leu Ser Gly Met Asn Leu Asp		

625	630	635	640
Val Ala Lys Lys Pro Pro Arg Thr Ser Glu Arg Gln Ala Glu Ser Cys			
	645	650	655
Gly Val Gly Gln Gly His Ala Glu Asn Gln Cys Gly Leu Cys Gln Pro			
	660	665	670
Gly Glu Tyr Ser Ala Asp Gly Phe Ala Pro Cys Gln Leu Cys Ala Leu			
	675	680	685
Gly Thr Phe Gln Pro Glu Ala Gly Arg Thr Ser Cys Phe Pro Cys Gly			
	690	695	700
Gly Gly Leu Ala Thr Lys His Gln Gly Ala Thr Ser Phe Gln Asp Cys			
705	710	715	720
Glu Thr Arg Val Gln Cys Ser Pro Gly His Phe Tyr Asn Thr Thr Thr			
	725	730	735
His Arg Cys Ile Arg Cys Pro Val Gly Thr Tyr Gln Pro Glu Phe Gly			
	740	745	750
Lys Asn Asn Cys Val Ser Cys Pro Gly Asn Thr Thr Thr Asp Phe Asp			
	755	760	765
Gly Ser Thr Asn Ile Thr Gln Cys Lys Asn Arg Arg Cys Gly Gly Glu			
	770	775	780
Leu Gly Asp Phe Thr Gly Tyr Ile Glu Ser Pro Asn Tyr Pro Gly Asn			
785	790	795	800
Tyr Pro Ala Asn Thr Glu Cys Thr Trp Thr Ile Asn Pro Pro Pro Lys			
	805	810	815
Arg Arg Ile Leu Ile Val Val Pro Glu Ile Phe Leu Pro Ile Glu Asp			
	820	825	830
Asp Cys Gly Asp Tyr Leu Val Met Arg Lys Thr Ser Ser Ser Asn Ser			
	835	840	845
Val Thr Thr Tyr Glu Thr Cys Gln Thr Tyr Glu Arg Pro Ile Ala Phe			
	850	855	860
Thr Ser Arg Ser Lys Lys Leu Trp Ile Gln Phe Lys Ser Asn Glu Gly			
865	870	875	880
Asn Ser Ala Arg Gly Phe Gln Gly Pro Tyr Val Thr Tyr Asp Glu Asp			
	885	890	895
Tyr Gln Glu Leu Ile Glu Asp Ile Val Arg Asp Gly Arg Leu Tyr Ala			
	900	905	910
Ser Glu Asn His Gln Glu Ile Leu Lys Asp Lys Lys Leu Ile Lys Ala			

915	920	925
Leu Phe Asp Val Leu Ala His Pro Gln Asn Tyr Phe Lys Tyr Thr Ala		
930	935	940
Gln Glu Ser Arg Glu Met Phe Pro Arg Ser Phe Ile Arg Leu Leu Arg		
945	950	955
Ser Lys Val Ser Arg Phe Leu Arg Pro Tyr Lys		
965	970	

&lt;210&gt; 3218

&lt;211&gt; 426

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3218

Met Leu Gly Ser Phe Ser Gly Thr Thr Val Pro Ala Leu Leu Asn Ser		
1	5	10
Thr Ser Asn Gln Leu Tyr Leu His Phe Tyr Ser Asp Ile Ser Val Ser		
20	25	30
Ala Ala Gly Phe His Leu Glu Tyr Lys Thr Val Gly Leu Ser Ser Cys		
35	40	45
Pro Glu Pro Ala Val Pro Ser Asn Gly Val Lys Thr Gly Glu Arg Tyr		
50	55	60
Leu Val Asn Asp Val Val Ser Phe Gln Cys Glu Pro Gly Tyr Ala Leu		
65	70	75
Gln Gly His Ala His Ile Ser Cys Met Pro Gly Thr Val Arg Arg Trp		
85	90	95
Asn Tyr Pro Pro Pro Leu Cys Ile Ala Gln Cys Gly Gly Thr Val Glu		
100	105	110
Glu Met Glu Gly Val Ile Leu Ser Leu Gly Phe Pro Gly Asn Tyr Pro		
115	120	125
Ser Asn Met Asp Cys Ser Trp Lys Ile Ala Leu Pro Val Gly Phe Gly		
130	135	140
Ala His Ile Gln Phe Leu Asn Phe Ser Thr Glu Pro Asn His Asp Tyr		
145	150	155
Ile Glu Ile Arg Asn Gly Pro Tyr Glu Thr Ser Arg Met Met Gly Arg		

	165		170		175
Phe Ser Gly Ser Glu Leu Pro Ser Ser Leu Leu Ser Thr Ser His Glu					
	180		185		190
Thr Thr Val Tyr Phe His Ser Asp His Ser Gln Asn Arg Pro Gly Phe					
	195		200		205
Lys Leu Glu Tyr Gln Ala Tyr Glu Leu Gln Glu Cys Pro Asp Pro Glu					
	210		215		220
Pro Phe Ala Asn Gly Ile Val Arg Gly Ala Gly Tyr Asn Val Gly Gln					
225		230		235	240
Ser Val Thr Phe Glu Cys Leu Pro Gly Tyr Gln Leu Thr Gly His Pro					
	245		250		255
Val Leu Thr Cys Gln His Gly Thr Asn Arg Asn Trp Asp His Pro Leu					
	260		265		270
Pro Lys Cys Glu Val Pro Cys Gly Gly Asn Ile Thr Ser Ser Asn Gly					
	275		280		285
Thr Val Tyr Ser Pro Gly Phe Pro Ser Pro Tyr Ser Ser Ser Gln Asp					
	290		295		300
Cys Val Trp Leu Ile Thr Val Pro Ile Gly His Gly Val Arg Leu Asn					
305		310		315	320
Leu Ser Leu Leu Gln Thr Glu Pro Ser Gly Asp Phe Ile Thr Ile Trp					
	325		330		335
Asp Gly Pro Gln Gln Thr Ala Pro Arg Leu Gly Val Phe Thr Arg Ser					
	340		345		350
Met Ala Lys Lys Thr Val Gln Ser Ser Ser Asn Gln Val Leu Leu Lys					
	355		360		365
Phe His Arg Asp Ala Ala Thr Gly Gly Ile Phe Ala Ile Ala Phe Ser					
	370		375		380
Asp His Cys Arg Tyr Phe Asn Gln Lys Ser Gly Lys Leu Asp Phe Thr					
385		390		395	400
Pro Ser Ser Thr Leu Gly Gln Leu Cys Lys Thr Leu His Arg Ser Leu					
	405		410		415
Pro His Leu Arg Leu Gln Phe Leu His Leu					
	420		425		

&lt;211&gt; 292

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3219

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Met Ser Arg Ile Pro Leu Gly Lys Val Leu Leu Arg Asn Val Ile Arg
  1             5             10             15
His Thr Asp Ala His Asn Lys Ile Gln Glu Glu Ser Asp Met Trp Lys
      20             25             30
Ile Arg Glu Leu Glu Lys Gln Met Glu Asp Ala Tyr Arg Gly Thr Lys
      35             40             45
Arg Lys Met Leu Pro Ser Ser Ser Ser Arg Met Arg Ser Asp Gly Phe
      50             55             60
Asp Glu Glu Ser Gln Arg Tyr Tyr Trp Arg Pro Lys Asn Glu Ile Ser
      65             70             75             80
Gly Thr Leu Glu Asp Asp Phe Leu Lys Ala Lys Ser Trp Asn Lys Lys
      85             90             95
Phe Tyr Asp Tyr Glu Ala Asn Met Pro Asp Arg Trp Gly His Ser Gly
      100            105            110
Tyr Lys Glu Leu Tyr Pro Glu Glu Phe Glu Thr Asn Ser Asp Gln Gln
      115            120            125
Asp Ile Thr Asn Gly Lys Lys Thr Ser Pro Gln Val Lys Ser Ser Thr
      130            135            140
His Glu Ser Arg Lys His Lys Lys Ser Lys Lys Ser His Lys Lys Lys
      145            150            155            160
Gln Lys Lys Arg Ser His Lys Lys Gln Lys Lys Ser Lys Lys Glu Ala
      165            170            175
Thr Asp Ile Thr Ala Asp Ser Ser Ser Glu Phe Ser Glu Glu Thr Gly
      180            185            190
Ala Ser Gly Thr Arg Lys Gly Lys Gln Pro His Lys Arg Lys Lys Lys
      195            200            205
Ser Arg Lys Lys Ser Leu Lys Lys Pro Ala Leu Phe Leu Glu Ala Glu
      210            215            220
Ser Asn Thr Ser His Ser Asp Asp Ser Ala Ser Ser Ser Ser Glu Glu
      225            230            235            240
Ser Glu Glu Arg Asp Thr Lys Lys Thr Lys Arg Lys Lys Arg Glu Lys

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245                      250                      255  
 Lys Ala His Thr Ser Val Ala Asn Asn Glu Ile Gln Glu Arg Thr Asn  
 260                      265                      270  
 Lys Arg Thr Asn Trp Lys Val Ala Thr Asp Glu Arg Ser Ala Glu Ser  
 275                      280                      285  
 Ser Glu Asp Asp  
 290

<210> 3220

<211> 1023

<212> PRT

<213> Homo sapiens

<400> 3220

Met Ser Leu Gly Val Ala Ala Ile Asn Gln Ala Ile Lys Glu Gly Lys  
 1                      5                      10                      15  
 Ala Ala Gln Thr Glu Arg Val Leu Arg Asn Pro Ala Val Ala Leu Arg  
 20                      25                      30  
 Gly Val Val Pro Asp Cys Ala Asn Gly Tyr Gln Arg Ala Leu Glu Ser  
 35                      40                      45  
 Ala Met Ala Lys Lys Gln Arg Pro Ala Asp Thr Ala Phe Trp Val Gln  
 50                      55                      60  
 His Asp Met Lys Asp Gly Thr Ala Tyr Tyr Phe His Leu Gln Thr Phe  
 65                      70                      75                      80  
 Gln Gly Ile Trp Glu Gln Pro Pro Gly Cys Pro Leu Asn Thr Ser His  
 85                      90                      95  
 Leu Thr Arg Glu Glu Ile Gln Ser Ala Val Thr Lys Val Thr Ala Ala  
 100                      105                      110  
 Tyr Asp Arg Gln Gln Leu Trp Lys Ala Asn Val Gly Phe Val Ile Gln  
 115                      120                      125  
 Leu Gln Ala Arg Leu Arg Gly Phe Leu Val Arg Gln Lys Phe Ala Glu  
 130                      135                      140  
 His Ser His Phe Leu Arg Thr Trp Leu Pro Ala Val Ile Lys Ile Gln  
 145                      150                      155                      160  
 Ala His Trp Arg Gly Tyr Arg Gln Arg Lys Ile Tyr Leu Glu Trp Leu



165	170	175
Gln Tyr Phe Lys Ala Asn Leu Asp	Ala Ile Ile Lys Ile Gln Ala Trp	
180	185	190
Ala Arg Met Trp Ala Ala Arg Arg	Gln Tyr Leu Arg Arg Leu His Tyr	
195	200	205
Phe Gln Lys Asn Val Asn Ser Ile	Val Lys Ile Gln Ala Phe Phe Arg	
210	215	220
Ala Arg Lys Ala Gln Asp Asp Tyr	Arg Ile Leu Val His Ala Pro His	
225	230	235
Pro Pro Leu Ser Val Val Arg Arg	Phe Ala His Leu Leu Asn Gln Ser	
245	250	255
Gln Gln Asp Phe Leu Ala Glu Ala	Glu Leu Leu Lys Leu Gln Glu Glu	
260	265	270
Val Val Arg Lys Ile Arg Ser Asn	Gln Gln Leu Glu Gln Asp Leu Asn	
275	280	285
Ile Met Asp Ile Lys Ile Gly Leu	Leu Val Lys Asn Arg Ile Thr Leu	
290	295	300
Gln Glu Val Val Ser His Cys Lys	Lys Leu Thr Lys Arg Asn Lys Glu	
305	310	315
Gln Leu Ser Asp Met Met Val Leu	Asp Lys Gln Lys Gly Leu Lys Ser	
325	330	335
Leu Ser Lys Glu Lys Arg Gln Lys	Leu Glu Ala Tyr Gln His Leu Phe	
340	345	350
Tyr Leu Leu Gln Thr Gln Pro Ile	Tyr Leu Ala Lys Leu Ile Phe Gln	
355	360	365
Met Pro Gln Asn Lys Thr Thr Lys	Phe Met Glu Ala Val Ile Phe Ser	
370	375	380
Leu Tyr Asn Tyr Ala Ser Ser Arg	Arg Glu Ala Tyr Leu Leu Leu Gln	
385	390	395
Leu Phe Lys Thr Ala Leu Gln Glu	Glu Ile Lys Ser Lys Val Glu Gln	
405	410	415
Pro Gln Asp Val Val Thr Gly Asn	Pro Thr Val Val Arg Leu Val Val	
420	425	430
Arg Phe Tyr Arg Asn Gly Arg Gly	Gln Ser Ala Leu Gln Glu Ile Leu	
435	440	445
Gly Lys Val Ile Gln Asp Val Leu	Glu Asp Lys Val Leu Ser Val His	

450	455	460	
Thr Asp Pro Val His Leu Tyr Lys Asn Trp Ile Asn Gln Thr Glu Ala			
465	470	475	480
Gln Thr Gly Gln Arg Ser His Leu Pro Tyr Asp Val Thr Pro Glu Gln			
	485	490	495
Ala Leu Ser His Pro Glu Val Gln Arg Arg Leu Asp Ile Ala Leu Arg			
	500	505	510
Asn Leu Leu Ala Met Thr Asp Lys Phe Leu Leu Ala Ile Thr Ser Ser			
	515	520	525
Val Asp Gln Ile Pro Tyr Gly Met Arg Tyr Val Ala Lys Val Leu Lys			
	530	535	540
Ala Thr Leu Ala Glu Lys Phe Pro Asp Ala Thr Asp Ser Glu Val Tyr			
545	550	555	560
Lys Val Val Gly Asn Leu Leu Tyr Tyr Arg Phe Leu Asn Pro Ala Val			
	565	570	575
Val Ala Pro Asp Ala Phe Asp Ile Val Ala Met Ala Ala Gly Gly Ala			
	580	585	590
Leu Ala Ala Pro Gln Arg His Ala Leu Gly Ala Val Ala Gln Leu Leu			
	595	600	605
Gln His Ala Ala Ala Gly Lys Ala Phe Ser Gly Gln Ser Gln His Leu			
	610	615	620
Arg Val Leu Asn Asp Tyr Leu Glu Glu Thr His Leu Lys Phe Arg Lys			
625	630	635	640
Phe Ile His Arg Ala Cys Gln Val Pro Glu Pro Glu Glu Arg Phe Ala			
	645	650	655
Val Asp Glu Tyr Ser Asp Met Val Ala Val Ala Lys Pro Met Val Tyr			
	660	665	670
Ile Thr Val Gly Glu Leu Val Asn Thr His Arg Leu Leu Leu Glu His			
	675	680	685
Gln Asp Cys Ile Ala Pro Asp His Gln Asp Pro Leu His Glu Leu Leu			
	690	695	700
Glu Asp Leu Gly Glu Leu Pro Thr Ile Pro Asp Leu Ile Gly Glu Ser			
705	710	715	720
Ile Ala Ala Asp Gly His Thr Asp Leu Ser Lys Leu Glu Val Ser Leu			
	725	730	735

Thr Leu Thr Asn Lys Phe Glu Gly Leu Glu Ala Asp Ala Asp Asp Ser  
 740 745 750  
 Asn Thr Arg Ser Leu Leu Leu Ser Thr Lys Gln Leu Leu Ala Asp Ile  
 755 760 765  
 Ile Gln Phe His Pro Gly Asp Thr Leu Lys Glu Ile Leu Ser Leu Ser  
 770 775 780  
 Ala Ser Arg Glu Gln Glu Ala Ala His Lys Gln Leu Met Ser Arg Arg  
 785 790 795 800  
 Gln Ala Cys Thr Ala Gln Thr Pro Glu Pro Leu Arg Arg His Arg Ser  
 805 810 815  
 Leu Thr Ala His Ser Leu Leu Pro Leu Ala Glu Lys Gln Arg Arg Val  
 820 825 830  
 Leu Arg Asn Leu Arg Arg Leu Glu Ala Leu Gly Leu Val Ser Ala Arg  
 835 840 845  
 Asn Gly Tyr Gln Gly Leu Val Asp Glu Leu Ala Lys Asp Ile Arg Asn  
 850 855 860  
 Gln His Arg His Arg His Arg Arg Lys Ala Glu Leu Val Lys Leu Gln  
 865 870 875 880  
 Ala Thr Leu Gln Gly Leu Ser Thr Lys Thr Thr Phe Tyr Glu Glu Gln  
 885 890 895  
 Gly Asp Tyr Tyr Ser Gln Tyr Ile Arg Ala Cys Leu Asp His Leu Ala  
 900 905 910  
 Pro Asp Ser Lys Ser Ser Gly Lys Gly Lys Lys Gln Pro Ser Leu His  
 915 920 925  
 Tyr Thr Ala Ala Gln Leu Leu Glu Lys Gly Val Leu Val Glu Ile Glu  
 930 935 940  
 Asp Leu Pro Ala Ser His Phe Arg Asn Val Ile Phe Asp Ile Thr Pro  
 945 950 955 960  
 Gly Asp Glu Ala Gly Lys Phe Glu Val Asn Ala Lys Phe Leu Gly Val  
 965 970 975  
 Asp Met Glu Arg Phe Gln Leu His Tyr Gln Asp Leu Leu Gln Leu Gln  
 980 985 990  
 Tyr Glu Gly Val Ala Val Met Lys Leu Phe Asn Lys Ala Lys Val Asn  
 995 1000 1005  
 Val Asn Leu Leu Ile Phe Leu Leu Asn Lys Lys Phe Leu Arg Lys  
 1010 1015 1020

&lt;210&gt; 3221

&lt;211&gt; 791

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3221

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Met Asp Gly Glu Ser Glu Val Asp Phe Ser Ser Asn Ser Ile Thr Pro
  1              5              10              15
Leu Trp Arg Arg Arg Ser Ile Pro Gln Pro His Gln Leu Leu Gly Arg
      20              25              30
Ser Lys Pro Arg Pro Gln Ser Tyr Gln Ser Pro Asn Gly Leu Leu Ile
      35              40              45
Thr Asp Phe Pro Val Glu Asp Gly Gly Thr Leu Ser Ala Ala Gln Ile
      50              55              60
Pro Ala Gln Val Pro Thr Ala Ser Asp Ser Arg Thr Val His Arg Ser
      65              70              75              80
Pro Leu Leu Leu Gly Ala Gln Arg Arg Ala Val Ala Asn Gly Gly Thr
      85              90              95
Ala Ser Pro Glu Tyr Arg Ala Ala Ser Pro Arg Leu Arg Arg Pro Lys
      100             105             110
Ser Pro Lys Leu Pro Lys Ala Val Pro Gly Gly Ser Pro Lys Ser Pro
      115             120             125
Ala Asn Gly Ala Val Thr Leu Pro Ala Pro Pro Pro Pro Pro Val Leu
      130             135             140
Arg Pro Pro Arg Thr Pro Asn Ala Pro Ala Pro Cys Thr Pro Glu Glu
      145             150             155             160
Asp Leu Thr Gly Leu Thr Ala Ser Pro Val Pro Ser Pro Thr Ala Asn
      165             170             175
Gly Leu Ala Ala Asn Asn Asp Ser Pro Gly Ser Gly Ser Gln Ser Gly
      180             185             190
Arg Lys Ala Lys Asp Pro Glu Arg Gly Leu Phe Pro Gly Pro Gln Lys
      195             200             205
Ser Ser Ser Glu Gln Lys Leu Pro Leu Gln Arg Leu Pro Ser Gln Glu
      210             215             220

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Asn Glu Leu Leu Glu Asn Pro Ser Val Val Leu Ser Thr Asn Ser Pro  
 225 230 235 240  
 Ala Ala Leu Lys Val Gly Lys Gln Gln Ile Ile Pro Lys Ser Leu Ala  
 245 250 255  
 Ser Glu Ile Lys Ile Ser Lys Ser Asn Asn Gln Asn Val Glu Pro His  
 260 265 270  
 Lys Arg Leu Leu Lys Val Arg Ser Met Val Glu Gly Leu Gly Gly Pro  
 275 280 285  
 Leu Gly His Ala Gly Glu Glu Ser Glu Val Asp Asn Asp Val Asp Ser  
 290 295 300  
 Pro Gly Ser Leu Arg Arg Gly Leu Arg Ser Thr Ser Tyr Arg Arg Ala  
 305 310 315 320  
 Val Val Ser Gly Phe Asp Phe Asp Ser Pro Thr Ser Ser Lys Lys Lys  
 325 330 335  
 Asn Arg Met Ser Gln Pro Val Leu Lys Val Val Met Glu Asp Lys Glu  
 340 345 350  
 Lys Phe Ser Ser Leu Gly Arg Ile Lys Lys Lys Met Leu Lys Gly Gln  
 355 360 365  
 Gly Thr Phe Asp Gly Glu Glu Asn Ala Val Leu Tyr Gln Asn Tyr Lys  
 370 375 380  
 Glu Lys Ala Leu Asp Ile Asp Ser Asp Glu Glu Ser Glu Pro Lys Glu  
 385 390 395 400  
 Gln Lys Ser Asp Glu Lys Ile Val Ile His His Lys Pro Leu Arg Ser  
 405 410 415  
 Thr Trp Ser Gln Leu Ser Ala Val Lys Arg Lys Gly Leu Ser Gln Thr  
 420 425 430  
 Val Ser Gln Glu Glu Arg Lys Arg Gln Glu Ala Ile Phe Glu Val Ile  
 435 440 445  
 Ser Ser Glu His Ser Tyr Leu Leu Ser Leu Glu Ile Leu Ile Arg Met  
 450 455 460  
 Phe Lys Asn Ser Lys Glu Leu Ser Asp Thr Met Thr Lys Thr Glu Arg  
 465 470 475 480  
 His His Leu Phe Ser Asn Ile Thr Asp Val Cys Glu Ala Ser Lys Lys  
 485 490 495  
 Phe Phe Ile Glu Leu Glu Ala Arg His Gln Asn Asn Ile Phe Ile Asp  
 500 505 510

Asp Ile Ser Asp Ile Val Glu Lys His Thr Ala Ser Thr Phe Asp Pro  
 515 520 525  
 Tyr Val Lys Tyr Cys Thr Asn Glu Val Tyr Gln Gln Arg Thr Leu Gln  
 530 535 540  
 Lys Leu Leu Ala Thr Asn Pro Ser Phe Lys Glu Val Leu Ser Arg Ile  
 545 550 555 560  
 Glu Ser His Glu Asp Cys Arg Asn Leu Pro Met Ile Ser Phe Leu Ile  
 565 570 575  
 Leu Pro Met Gln Arg Val Thr Arg Leu Pro Leu Leu Met Asp Thr Ile  
 580 585 590  
 Cys Gln Lys Thr Pro Lys Asp Ser Pro Lys Tyr Glu Val Cys Lys Arg  
 595 600 605  
 Ala Leu Lys Glu Val Ser Lys Leu Val Arg Leu Cys Asn Glu Gly Ala  
 610 615 620  
 Arg Lys Met Glu Arg Thr Glu Met Met Tyr Thr Ile Asn Ser Gln Leu  
 625 630 635 640  
 Glu Phe Lys Ile Lys Pro Phe Pro Leu Val Ser Ser Ser Arg Trp Leu  
 645 650 655  
 Val Lys Arg Gly Glu Leu Thr Ala Tyr Val Glu Asp Thr Val Leu Phe  
 660 665 670  
 Ser Arg Arg Thr Ser Lys Gln Gln Val Tyr Phe Phe Leu Phe Asn Asp  
 675 680 685  
 Val Leu Ile Ile Thr Lys Lys Lys Ser Glu Glu Ser Tyr Asn Val Asn  
 690 695 700  
 Asp Tyr Ser Leu Arg Asp Gln Leu Leu Val Glu Ser Cys Asp Asn Glu  
 705 710 715 720  
 Glu Leu Asn Ser Ser Pro Gly Lys Asn Ser Ser Thr Met Leu Tyr Ser  
 725 730 735  
 Arg Gln Ser Ser Ala Ser His Leu Phe Thr Leu Thr Val Leu Ser Asn  
 740 745 750  
 His Ala Asn Glu Lys Val Glu Met Leu Leu Gly Ala Glu Thr Gln Ser  
 755 760 765  
 Glu Arg Ala Arg Trp Ile Thr Ala Leu Gly His Ser Ser Gly Lys Pro  
 770 775 780  
 Pro Ala Asp Arg Thr Cys Gly  
 785 790

&lt;210&gt; 3222

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3222

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Met Arg Val Ser Met Gln Gln Thr Ala Gln Gly Gly Gly Pro His Gly
  1             5             10             15
Gln Arg Arg Asp Ala Asp Leu Arg Pro Ala Pro Pro Lys Leu Pro Val
      20             25             30
Gln Met Pro Leu Thr Pro Ser Asn Gln Gln Gln Asp Arg His Cys Val
      35             40             45
Arg Lys Val Gly Arg His Pro His Pro Cys Thr Ala Ala Ala Thr Pro
      50             55             60
Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln Lys His His
      65             70             75             80
Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr Ser Leu Pro
      85             90             95
Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu Ser Val Ser
      100            105            110
Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val Leu Ala Ser
      115            120            125
Val Ser Ile Ala Ser Ser Trp Pro Ser Ser Ala Arg Cys Ser Lys Pro
      130            135            140
Thr Ala Val Glu Ala Asn Val Ile Ala Leu Pro Leu Arg Arg Trp His
      145            150            155            160
Arg Asp Trp Gln Arg Cys His Leu Gly Val Cys Val Leu Ser Leu Arg
      165            170            175
Val Gln Ala Ser Pro Ala Pro Ala Val Val Leu Gly Pro Gln Met Arg
      180            185            190
Asp His Gly His Glu Asp Gln Pro Pro Arg Gln Pro Leu Pro Ser Ser
      195            200            205
Leu Gly Ser Gly Val Phe
      210

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&lt;210&gt; 3223

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3223

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Met Ile Phe Lys Phe Pro Ser Ser Phe Leu Val Leu Trp Ser Leu Leu
  1             5             10             15
Arg Cys Gly Arg Lys Gln Phe Val Ser Cys Ala Glu Gln Phe Arg Ser
          20             25             30
Pro Gly Ser Leu Ser Pro Gly Pro Lys Pro Pro Arg Arg Glu Ser Phe
      35             40             45
Ser Gly Pro Trp Glu Gln Val Leu Lys Gly Phe Leu Leu Lys Arg Gly
      50             55             60
Arg Gln Pro Ala Val Arg Val Arg Ile Val Val Val Pro Glu Pro Tyr
      65             70             75             80
Gly Gln Ser Phe Glu Arg Ile Gly Leu Gly Arg Phe Ser Gly Gln Lys
          85             90             95
Arg Leu Ile Ser Ile Leu Gly Ala Leu Ser His Lys Gly Tyr Leu Ile
          100            105            110
Glu Arg Lys Asn Gly Val Cys Gly Ser Phe Ala Pro Ile Ser Lys Trp
          115            120            125
Val Asp Ser Gly Cys Lys Gly Ile Phe Ser His Phe Ser Gln Gln Arg
          130            135            140
Lys Ala Phe Ser Ala Lys Ile Leu Lys Gly Glu
      145            150            155

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&lt;210&gt; 3224

&lt;211&gt; 751

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3224



Met Arg Leu Lys Ile Ser Leu Leu Lys Glu Pro Lys His Gln Glu Leu  
 1 5 10 15  
 Val Ser Cys Val Gly Trp Thr Thr Ala Glu Glu Leu Tyr Ser Cys Ser  
 20 25 30  
 Asp Asp His Gln Ile Val Lys Trp Asn Leu Leu Thr Ser Glu Thr Thr  
 35 40 45  
 Gln Ile Val Lys Leu Pro Asp Asp Ile Tyr Pro Ile Asp Phe His Trp  
 50 55 60  
 Phe Pro Lys Ser Leu Gly Val Lys Lys Gln Thr Gln Ala Glu Ser Phe  
 65 70 75 80  
 Val Leu Thr Ser Ser Asp Gly Lys Phe His Leu Ile Ser Lys Leu Gly  
 85 90 95  
 Arg Val Glu Lys Ser Val Glu Ala His Cys Gly Ala Val Leu Ala Gly  
 100 105 110  
 Arg Trp Asn Tyr Glu Gly Thr Ala Leu Val Thr Val Gly Glu Asp Gly  
 115 120 125  
 Gln Ile Lys Ile Trp Ser Lys Thr Gly Met Leu Arg Ser Thr Leu Ala  
 130 135 140  
 Gln Gln Gly Thr Pro Val Tyr Ser Val Ala Trp Gly Pro Asp Ser Glu  
 145 150 155 160  
 Lys Val Leu Tyr Thr Ala Gly Lys Gln Leu Ile Ile Lys Pro Leu Gln  
 165 170 175  
 Pro Asn Ala Lys Val Leu Gln Trp Lys Ala His Asp Gly Ile Ile Leu  
 180 185 190  
 Lys Val Asp Trp Asn Ser Val Asn Asp Leu Ile Leu Ser Ala Gly Glu  
 195 200 205  
 Asp Cys Lys Tyr Lys Val Trp Asp Ser Tyr Gly Arg Pro Leu Tyr Asn  
 210 215 220  
 Ser Gln Pro His Glu His Pro Ile Thr Ser Val Ala Trp Ala Pro Asp  
 225 230 235 240  
 Gly Glu Leu Phe Ala Val Gly Ser Phe His Thr Leu Arg Leu Cys Asp  
 245 250 255  
 Lys Thr Gly Trp Ser Tyr Ala Leu Glu Lys Pro Asn Thr Gly Ser Ile  
 260 265 270  
 Phe Asn Ile Ala Trp Ser Ile Asp Gly Thr Gln Ile Ala Gly Ala Cys  
 275 280 285

Gly Asn Gly His Val Val Phe Ala His Val Val Glu Gln His Trp Glu			
290	295	300	
Trp Lys Asn Phe Gln Val Thr Leu Thr Lys Arg Arg Ala Met Gln Val			
305	310	315	320
Arg Asn Val Leu Asn Asp Ala Val Asp Leu Leu Glu Phe Arg Asp Arg			
	325	330	335
Val Ile Lys Ala Ser Leu Asn Tyr Ala His Leu Val Val Ser Thr Ser			
	340	345	350
Leu Gln Cys Tyr Val Phe Ser Thr Lys Asn Trp Asn Thr Pro Ile Ile			
	355	360	365
Phe Asp Leu Lys Glu Gly Thr Val Ser Leu Ile Leu Gln Ala Glu Arg			
370	375	380	
His Phe Leu Leu Val Asp Gly Ser Ser Ile Tyr Leu Tyr Ser Tyr Glu			
385	390	395	400
Gly Arg Phe Ile Ser Ser Pro Lys Phe Pro Gly Met Arg Thr Asp Ile			
	405	410	415
Leu Asn Ala Gln Thr Val Ser Leu Ser Asn Asp Thr Ile Ala Ile Arg			
	420	425	430
Asp Lys Ala Asp Glu Lys Ile Ile Phe Leu Phe Glu Ala Ser Thr Gly			
	435	440	445
Lys Pro Leu Gly Asp Gly Lys Phe Leu Ser His Lys Asn Glu Ile Leu			
	450	455	460
Glu Ile Ala Leu Asp Gln Lys Gly Leu Thr Asn Asp Arg Lys Ile Ala			
465	470	475	480
Phe Ile Asp Lys Asn Arg Asp Leu Cys Ile Thr Ser Val Lys Arg Phe			
	485	490	495
Gly Lys Glu Glu Gln Ile Ile Lys Leu Gly Thr Met Val His Thr Leu			
	500	505	510
Ala Trp Asn Asp Thr Cys Asn Ile Leu Cys Gly Leu Gln Asp Thr Arg			
	515	520	525
Phe Ile Val Trp Tyr Tyr Pro Asn Thr Val Tyr Val Asp Arg Asp Ile			
	530	535	540
Leu Pro Lys Thr Leu Tyr Glu Arg Asp Ala Ser Glu Phe Ser Lys Asn			
545	550	555	560
Pro His Ile Val Ser Phe Val Gly Asn Gln Val Thr Ile Arg Arg Ala			
	565	570	575

Asp Gly Ser Leu Val His Ile Ser Ile Pro Pro Tyr Pro Ala Ile Leu  
 580 585 590  
 His Glu Tyr Val Ser Ser Ser Lys Trp Glu Asp Ala Val Arg Leu Cys  
 595 600 605  
 Arg Phe Val Lys Glu Gln Thr Met Trp Ala Cys Leu Ala Ala Met Ala  
 610 615 620  
 Val Ala Asn Arg Asp Met Thr Thr Ala Glu Ile Ala Tyr Ala Ala Ile  
 625 630 635 640  
 Gly Glu Ile Asp Lys Val Gln Tyr Ile Asn Ser Ile Lys Asn Leu Pro  
 645 650 655  
 Ser Lys Glu Ser Lys Met Ala His Ile Leu Leu Phe Ser Gly Asn Ile  
 660 665 670  
 Gln Glu Ala Glu Ile Val Leu Leu Gln Ala Gly Leu Val Tyr Gln Ala  
 675 680 685  
 Ile Gln Ile Asn Ile Asn Leu Tyr Asn Trp Glu Arg Ala Leu Glu Leu  
 690 695 700  
 Ala Val Lys Tyr Lys Thr His Val Asp Thr Val Leu Ala Tyr Arg Gln  
 705 710 715 720  
 Lys Phe Leu Glu Thr Phe Gly Lys Gln Glu Thr Asn Lys Arg Tyr Leu  
 725 730 735  
 His Tyr Ala Glu Gly Leu Gln Ile Asp Trp Glu Lys Ile Lys Ala  
 740 745 750

<210> 3225

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3225

Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln  
 1 5 10 15  
 Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile  
 20 25 30  
 Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln  
 35 40 45

Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met  
 50 55 60  
 Val Leu Val Gln Gln Leu His Gly Gly Arg Gly His Val Leu Asp Pro  
 65 70 75 80  
 Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys  
 85 90 95  
 Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly  
 100 105 110  
 Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val  
 115 120 125  
 Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe  
 130 135 140  
 Thr  
 145

<210> 3226

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3226

Met Ala Phe Gly Glu Pro Pro Ser Gly His Ser Thr Arg His Arg Thr  
 1 5 10 15  
 Leu His Gly Leu Ser Phe His Thr Ala Met Gly Met Ala Trp Ser Leu  
 20 25 30  
 His Tyr Gln Gly Gln Gly Gly Thr Leu Cys Leu Val Gly Val Ser Thr  
 35 40 45  
 Pro Ser His Asp Lys Ala Val Leu Gln Gly Leu Pro His Phe Ser Val  
 50 55 60  
 Asn Leu Gly Val Gln Pro Ser Ala Leu Ala Gly Arg Arg Gly Asp Ala  
 65 70 75 80  
 Ser Cys Pro Ser Ser Trp Arg Ser Ala Asp Pro Thr Val Ser Pro Asn  
 85 90 95  
 Leu Gly Ala Pro Gly Gly Pro Asn Ala Ile Asp Ala Leu His Gly Glu  
 100 105 110

Gln Leu Gly Leu Phe Leu Arg Thr Lys Met Gly Arg Asp Pro Lys Asp  
           115                    120                    125  
 Val His Gly Leu Thr Pro Ala Leu Cys Gly Pro Cys Leu Ala Gly Leu  
           130                    135                    140  
 Pro Ser Ser His Ser Pro Gln Phe Ser Cys Asn Thr Ala Pro Leu Lys  
           145                    150                    155                    160  
 Met Leu Ser

<210> 3227

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3227

Met Leu Ser Phe Ser Arg Asp Arg Leu Pro Ser Gly Arg Arg Val Ser  
       1                    5                    10                    15  
 Gly Lys Cys Pro Pro Pro Pro Leu Gly Met Ala Val Gly Arg Gly Gly  
                     20                    25                    30  
 Ser Gly Cys Pro Glu Glu Gly Ser Gly Arg Lys Leu Glu Leu Leu Glu  
                     35                    40                    45  
 Ser Gln Leu Pro Ala Glu Arg Ala Arg Glu Glu Ala Gly Pro Ser Val  
           50                    55                    60  
 Arg Arg Pro Arg Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu  
       65                    70                    75                    80  
 Val Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu  
                     85                    90                    95  
 His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu Asp  
           100                    105                    110  
 Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His Gly Trp  
           115                    120                    125  
 Thr Met Ser Gly Ile Phe Glu Asn Trp Leu His Lys Leu Val Ser Ala  
           130                    135                    140  
 Leu His Thr Arg Glu Lys Asp Ala Asn Val Val Val Val Asp Trp Leu  
       145                    150                    155                    160

Pro Leu Ala His Gln Leu Tyr Thr Asp Ala Val Asn Asn Thr Arg Val  
 165 170 175  
 Val Gly His Ser Ile Ala Arg Met Leu Asp Trp Leu Gln Glu Lys Asp  
 180 185 190  
 Asp Phe Ser Leu Gly Asn Val His Leu Ile Gly Tyr Ser Leu Gly Ala  
 195 200 205  
 His Val Ala Gly Tyr Ala Gly Asn Phe Val Lys Gly Thr Val Gly Arg  
 210 215 220  
 Ile Thr Gly Leu Asp Pro Ala Gly Pro Met Phe Glu Gly Ala Asp Ile  
 225 230 235 240  
 His Lys Arg Leu Ser Pro Asp Asp Ala Asp Phe Val Asp Val Leu His  
 245 250 255  
 Thr Tyr Thr Arg Ser Phe Gly Leu Ser Ile Gly Ile Gln Met Pro Val  
 260 265 270  
 Gly His Ile Asp Ile Tyr Pro Asn Gly Gly Asp Phe Gln Pro Gly Cys  
 275 280 285  
 Gly Leu Asn Asp Val Leu Gly Ser Ile Ala Tyr Gly Thr Ile Thr Glu  
 290 295 300  
 Val Val Lys Cys Glu His Glu Arg Ala Val His Leu Phe Val Asp Ser  
 305 310 315 320  
 Leu Val Asn Gln Asp Lys Pro Ser Phe Ala Phe Gln Cys Thr Asp Ser  
 325 330 335  
 Asn Arg Phe Lys Lys Gly Ile Cys Leu Ser Cys Arg Lys Asn Arg Cys  
 340 345 350  
 Asn Ser Ile Gly Tyr Asn Ala Lys Lys Met Arg Asn Lys Arg Asn Ser  
 355 360 365  
 Lys Met Tyr Leu Lys Thr Arg Ala Gly Met Pro Phe Arg Gly Asn Leu  
 370 375 380  
 Gln Ser Leu Glu Cys Pro  
 385 390

<210> 3228

<211> 107

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3228

Met Val Ser Cys Leu Val Glu Gly Leu Lys Lys Ala Ala Tyr Lys Val  
 1 5 10 15  
 Val Asn Tyr Asp Lys Pro Lys Glu Ala Thr Gln Gly Lys Asp Glu Asn  
 20 25 30  
 Pro Ala Gln Phe Met Ala Arg Leu Val Ala Thr Leu Arg Arg Phe Thr  
 35 40 45  
 Ala Leu Asp Pro Glu Gly Pro Glu Gly Cys Leu Ile Leu Asn Met His  
 50 55 60  
 Phe Ile Ile Gln Ser Ala Pro Asp Ile Arg Lys Lys Phe Gln Lys Leu  
 65 70 75 80  
 Asp Ser Ser Pro Gln Thr Pro Gln Gln Asp Leu Ile Asn Leu Ala Phe  
 85 90 95  
 Lys Val Phe Asn Asn Arg Glu Glu Thr Ala Lys  
 100 105

&lt;210&gt; 3229

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

Met Ser Arg Glu Phe Arg Gly His Arg Asn Cys Val Leu Thr Leu Ala  
 1 5 10 15  
 Tyr Ser Ala Pro Trp Asp Leu Pro Ser Thr Pro Cys Ala Glu Glu Ala  
 20 25 30  
 Ala Ala Gly Gly Leu Leu Val Thr Gly Ser Thr Asp Gly Thr Ala Lys  
 35 40 45  
 Val Trp Gln Val Ala Ser Gly Cys Cys His Gln Thr Leu Arg Gly His  
 50 55 60  
 Thr Gly Ala Val Leu Cys Leu Val Leu Asp Thr Pro Gly His Thr Ala  
 65 70 75 80  
 Phe Thr Gly Ser Thr Asp Ala Thr Ile Arg Ala Trp Asp Ile Leu Ser  
 85 90 95

Gly Glu Gln Leu Arg Val Phe Arg Glu His Arg Gly Ser Val Ile Cys  
                   100                  105                  110  
 Leu Glu Cys Ser Arg Ala Ala Gly Thr Leu Ala Pro Gly Pro Ser Thr  
                   115                  120                  125  
 Arg Ser Leu Glu Ser Cys Gly Gly Cys Ser Gly Ala Thr His Ser Ser  
                   130                  135                  140  
 Ser Thr Ala Ser Arg Cys Thr Ala Arg Cys Ser Thr Pro Pro Arg Thr  
 145                  150                  155                  160  
 Thr Ala Pro Cys Ala Ser Gly Thr Cys Ala Gly Ser Glu Val Pro Arg  
                   165                  170                  175  
 Gly Pro Leu Arg Pro Arg Ala Ala Ser Arg Gly Ser Ser Ala Thr Arg  
                   180                  185                  190  
 Trp Ala Ala Pro Pro Arg Pro Cys Ser Arg Pro Asp Pro Ala Gly Pro  
                   195                  200                  205  
 Leu Gln Thr Pro Ala Gln Thr Pro Ser Gly Ser Gln Ser Ala Pro Pro  
                   210                  215                  220  
 Cys Tyr Pro Arg Trp Trp Arg Pro Met Ala Gly Glu Gly Arg Gly Ala  
  
 225                  230                  235                  240  
 Arg Lys Pro Gly Arg Glu Glu Ser Pro Ser Gln Ala Ser Gly Phe Ser  
                   245                  250                  255  
 Leu Val Ala Arg Arg Arg Trp Glu Arg Glu Cys Ser Pro Trp Gly Pro  
                   260                  265                  270  
 Pro Pro Phe Pro Phe  
                   275

&lt;210&gt; 3230

&lt;211&gt; 586

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3230

Met Lys Tyr Ile Leu Val Thr Gly Gly Val Ile Ser Gly Ile Gly Lys  
           1                  5                  10                  15  
 Gly Ile Ile Ala Ser Ser Ile Gly Thr Ile Leu Lys Ser Cys Gly Leu



20	25	30	
Arg Val Thr Ala Ile Lys Ile Asp Pro Tyr Ile Asn Ile Asp Ala Gly			
35	40	45	
Thr Phe Ser Pro Tyr Glu His Gly Glu Val Phe Val Leu Asn Asp Gly			
50	55	60	
Gly Glu Val Asp Leu Asp Leu Gly Asn Tyr Glu Arg Phe Leu Asp Ile			
65	70	75	80
Asn Leu Tyr Lys Asp Asn Asn Ile Thr Thr Gly Lys Ile Tyr Gln His			
85	90	95	
Val Ile Asn Lys Glu Arg Arg Gly Asp Tyr Leu Gly Lys Thr Val Gln			
100	105	110	
Val Val Pro His Ile Thr Asp Ala Val Gln Glu Trp Val Met Asn Gln			
115	120	125	
Ala Lys Val Pro Val Asp Gly Asn Lys Glu Glu Pro Gln Ile Cys Val			
130	135	140	
Ile Glu Leu Gly Gly Thr Ile Gly Asp Ile Glu Gly Met Pro Phe Val			
145	150	155	160
Glu Ala Phe Arg Gln Phe Gln Phe Lys Ala Lys Arg Glu Asn Phe Cys			
165	170	175	
Asn Ile His Val Ser Leu Val Pro Gln Leu Ser Ala Thr Gly Glu Gln			
180	185	190	
Lys Thr Lys Pro Thr Gln Asn Ser Val Arg Ala Leu Arg Gly Leu Gly			
195	200	205	
Leu Ser Pro Asp Leu Ile Val Cys Arg Ser Ser Thr Pro Ile Glu Met			
210	215	220	
Ala Val Lys Glu Lys Ile Ser Met Phe Cys His Val Asn Pro Glu Gln			
225	230	235	240
Val Ile Cys Ile His Asp Val Ser Ser Thr Tyr Arg Val Pro Val Leu			
245	250	255	
Leu Glu Glu Gln Ser Ile Val Lys Tyr Phe Lys Glu Arg Leu His Leu			
260	265	270	
Pro Ile Gly Asp Ser Ala Ser Asn Leu Leu Phe Lys Trp Arg Asn Met			
275	280	285	
Ala Asp Arg Tyr Glu Arg Leu Gln Lys Ile Cys Ser Ile Ala Leu Val			
290	295	300	

Gly Lys Tyr Thr Lys Leu Arg Asp Cys Tyr Ala Ser Val Phe Lys Ala  
 305 310 315 320  
 Leu Glu His Ser Ala Leu Ala Ile Asn His Lys Leu Asn Leu Met Tyr  
 325 330 335  
 Ile Asp Ser Ile Asp Leu Glu Lys Ile Thr Glu Thr Glu Asp Pro Val  
 340 345 350  
 Lys Phe His Glu Ala Trp Gln Lys Leu Cys Lys Ala Asp Gly Ile Leu  
 355 360 365  
 Val Pro Gly Gly Phe Gly Ile Arg Gly Thr Leu Gly Lys Leu Gln Ala  
 370 375 380  
 Ile Ser Trp Ala Arg Thr Lys Lys Ile Pro Phe Leu Gly Val Cys Leu  
 385 390 395 400  
 Gly Met Gln Leu Ala Val Ile Glu Phe Ala Arg Asn Cys Leu Asn Leu  
 405 410 415  
 Lys Asp Ala Asp Ser Thr Glu Phe Arg Pro Asn Ala Pro Val Pro Leu  
 420 425 430  
 Val Ile Asp Met Pro Glu His Asn Pro Gly Asn Leu Gly Gly Thr Met  
 435 440 445  
 Arg Leu Gly Ile Arg Arg Thr Val Phe Lys Thr Glu Asn Ser Ile Leu  
 450 455 460  
 Arg Lys Leu Tyr Gly Asp Val Pro Phe Ile Glu Glu Arg His Arg His  
 465 470 475 480  
 Arg Phe Glu Val Asn Pro Asn Leu Ile Lys Gln Phe Glu Gln Asn Asp  
 485 490 495  
 Leu Ser Phe Val Gly Gln Asp Val Asp Gly Asp Arg Met Glu Ile Ile  
 500 505 510  
 Glu Leu Ala Asn His Pro Tyr Phe Val Gly Val Gln Phe His Pro Glu  
 515 520 525  
 Phe Ser Ser Arg Pro Met Lys Pro Ser Pro Pro Tyr Leu Gly Leu Leu  
 530 535 540  
 Leu Ala Ala Thr Gly Asn Leu Asn Ala Tyr Leu Gln Gln Gly Cys Lys  
 545 550 555 560  
 Leu Ser Ser Ser Asp Arg Tyr Ser Asp Ala Ser Asp Asp Ser Phe Ser  
 565 570 575  
 Glu Pro Arg Ile Ala Glu Leu Glu Ile Ser  
 580 585

&lt;210&gt; 3231

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3231

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Met Asn Ile Ile Thr Ser Pro Leu Pro Gly Ser Pro Asn Ser Leu Arg
  1             5             10            15
Gly Ser Thr Phe Met Leu Gly Ser Ser Leu Glu Ala Ser Leu Gly Lys
          20            25            30
Leu Gln Ser Gln Pro Ser Thr Ser Thr Cys Ser Pro Ser Pro Val Lys
          35            40            45
Val Asn Lys Val Arg Val Ser Leu Glu Ala Arg Arg Leu Arg Val Gly
          50            55            60
Val Glu Arg Ser His Ser Gln Ser Cys Leu Val Tyr Leu Ser Val Met
          65            70            75            80
Lys Lys Arg Glu Glu Thr Asn Lys Met Glu Arg Val Glu Ala Arg Pro
          85            90            95
Ser Thr Cys Phe Leu Gly Glu Leu Gly His Ser Gly Gln His Arg Arg
          100           105           110
Val Pro Gly Leu Lys Lys Ile Asp His Gln Gln Gly Gln Gly Val Val
          115           120           125
Thr Glu Lys Gly Ala Thr Pro Trp Val Asn Lys Gln
          130           135           140

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&lt;210&gt; 3232

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3232

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Met Phe Phe Ile Phe Gln Lys Glu Lys Ala Leu Lys Ile Phe Leu Lys
  1             5             10            15

```

Cys Asp Cys His Leu Phe Ser Thr Lys Asn Phe Leu Arg Phe Phe Lys  
                   20                                  25                                  30  
 Arg Lys Ile Glu Ile Leu Ser Leu Pro Arg Phe Pro Ser Pro Pro Val  
                   35                                  40                                  45  
 Phe Lys Met Lys Ala Gln Val Gln Glu Trp Gly Ala Gln Val Pro Gly  
                   50                                  55                                  60  
 Val Tyr Thr Pro Pro Thr Gln Leu Arg Pro Ala Leu Ala Glu Gly Asp  
                   65                                  70                                  75                                  80  
 Ala Val Leu Ser Ser Gln Pro Arg Glu Ala Ser Phe Ser Thr Ser Asn  
                                   85                                  90                                  95  
 Pro Thr Ala Met Asn Val Asn Ser Leu Gly Cys Phe Gln Lys Gln Glu  
                   100                                  105                                  110  
 Ser Ala

<210> 3233

<211> 454

<212> PRT

<213> Homo sapiens

<400> 3233

Met Glu Ile His His Phe Leu Leu Lys Lys Arg Lys Gln Ala Asn Leu  
   1                                  5                                  10                                  15  
 Ala Gln Leu Leu Arg Asp Ser Gln Asp Arg Asn Lys His Leu Gly Glu  
                   20                                  25                                  30  
 Glu Ile Lys Glu Leu Gln Gln Arg Leu Gly Glu Val Gln Gly Asp Asn  
                   35                                  40                                  45  
 Lys Leu Leu Arg Met Thr Ile Ala Lys Gln Arg Leu Gly Asp Glu Ala  
                   50                                  55                                  60  
 Ile Gly Val Arg His Phe Ala Ala His Glu Arg Glu Asp Leu Val Gln  
                   65                                  70                                  75                                  80  
 Gln Leu Glu Arg Ala Lys Glu Gln Ile Glu Ser Leu Glu His Asp Leu  
                                   85                                  90                                  95  
 Gln Ala Ser Val Asp Glu Leu Gln Asp Val Lys Glu Glu Arg Ser Ser  
                   100                                  105                                  110

Tyr Gln Asp Lys Val Glu Arg Leu Asn Gln Glu Leu Asn His Ile Leu  
 115 120 125  
 Ser Gly His Glu Asn Arg Ile Ile Asp Val Asp Ala Leu Cys Met Glu  
 130 135 140  
 Asn Arg Tyr Leu Gln Glu Arg Leu Lys Gln Leu His Glu Glu Val Asn  
 145 150 155 160  
 Leu Leu Lys Ser Asn Ile Ala Lys Tyr Lys Asn Ala Leu Glu Arg Arg  
 165 170 175  
 Lys Asn Ser Lys Gly Gln Gly Lys Ser Ser Ser Ser Ala Leu Thr Gly  
 180 185 190  
 Val Leu Ser Ala Lys Gln Val Gln Asp Leu Leu Ser Glu Asp His Gly  
 195 200 205  
 Cys Ser Leu Pro Ala Thr Pro Gln Ser Ile Ser Asp Leu Lys Ser Leu  
 210 215 220  
 Ala Thr Ala Leu Leu Glu Thr Ile His Glu Lys Asn Met Val Ile Gln  
 225 230 235 240  
 His Gln Arg Gln Thr Asn Lys Ile Leu Gly Asn Arg Val Ala Glu Leu  
 245 250 255  
 Glu Lys Lys Leu Arg Thr Leu Glu Val Ser Gly Leu Trp Ser Leu Pro  
 260 265 270  
 Gly Gly Lys Asp Thr Ile Leu Phe Ser Asp Pro Thr Leu Pro Ser Gly  
 275 280 285  
 Gln Arg Ser Arg Ser Pro Leu Leu Lys Phe Val Glu Gln Pro Thr Glu  
 290 295 300  
 Asn Lys Ala Asp Pro Lys Asp Gly Glu Ala Gln Lys Gln Glu Glu Asp  
 305 310 315 320  
 Glu Ser Cys Ala Ala Ala Glu Ala Leu Thr Ala Pro Glu Asp Ala Gly  
 325 330 335  
 Arg Pro Ala Val Asn Ser Pro Ala Asn Gln Ser Arg Gly Asn Gln Cys  
 340 345 350  
 Lys Leu Phe His Pro Ser Leu Pro Gln Leu Pro Ser Glu Glu Glu Val  
 355 360 365  
 Asn Ser Leu Gly Arg Glu Ile Ile Lys Leu Thr Lys Glu Gln Ala Ala  
 370 375 380  
 Ala Glu Leu Glu Glu Val Arg Arg Glu Ser Pro Ile Glu Gly Gln Arg  
 385 390 395 400

Ser Glu Thr Gly Pro Ala Pro Pro Gly Leu Ala Ile Gln Gly Glu Leu  
                     405                    410                    415  
 Pro Lys Ser His Leu Asp Ser Phe Glu Ala Ser Arg Pro Ala Ala Lys  
                     420                    425                    430  
 Ala Ser Thr Pro Glu Asp Gly Lys Gly Ile Pro Glu Gly Gly Gly Met  
                     435                    440                    445  
 Arg Ser Thr Val Lys Thr  
                     450

<210> 3234

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3234

Met Thr Asp Leu Asn Lys His Ile Lys Gln Ala Gln Thr Gln Arg Lys  
   1                    5                    10                    15  
 Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val  
                     20                    25                    30  
 Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu  
                     35                    40                    45  
 Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys  
   50                    55                    60  
 Ser Gly Glu Ile Glu Arg Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala  
   65                    70                    75                    80  
 Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile  
                     85                    90                    95  
 Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile  
                     100                    105                    110  
 Leu Lys Glu Lys Gln Glu Lys Glu Ile Gln Thr Leu Gln Glu Glu Thr  
                     115                    120                    125  
 Lys Lys Val Gln Ala Glu Thr Ala Ser Lys Thr Arg Glu Val Gln Ala  
                     130                    135                    140  
 Gln Leu Leu Gln Glu Lys Arg Leu Leu Glu Lys Gln Leu Ser Glu Pro  
  145                    150                    155                    160

Asp Arg Arg Leu Leu Gly Lys Arg Lys Arg Arg Glu Leu Asn Met Lys  
                   165                  170                  175  
 Ala Gln Ala Leu Lys Leu Ala Ala Lys Arg Phe Ile Phe Glu Tyr Ser  
                   180                  185                  190  
 Cys Gly Ile Asn Arg Glu Asn Gln Gln Phe Lys Lys Glu Leu Leu Gln  
                   195                  200                  205  
 Leu Ile Glu Gln Ala Gln Lys Leu Thr Ala Thr Gln Ser His Leu Glu  
                   210                  215                  220  
 Asn Arg Lys Gln Gln Leu Gln Gln Glu Gln Trp Tyr Leu Glu Ser Leu  
 225                  230                  235                  240  
 Ile Gln Ala Arg Gln Arg Leu Gln Gly Ser His Asn Gln Cys Leu Asn  
                   245                  250                  255  
 Arg Gln Asp Val Pro Lys Thr Thr Pro Ser Leu Pro Gln Gly Thr Lys  
                   260                  265                  270  
 Ser Arg Ile Asn Pro Lys  
                   275

<210> 3235

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3235

Met Arg His Arg Ala Gln Gln Thr Gln Lys Phe Lys Ala Ala Tyr Ala  
   1                  5                  10                  15  
 Tyr Asn Leu Met Gly Ser Leu Ser His Glu Phe Arg Tyr Ser Phe Val  
                   20                  25                  30  
 Arg Val Leu Trp Phe Arg Ile Ser His Lys Ala Val Ile Lys Leu Leu  
                   35                  40                  45  
 Ala Arg Thr Gly Val Ser Ser Glu Val Gln Met Glu Glu Asp Ser Leu  
                   50                  55                  60  
 Leu Gln Arg Thr Asp Gly Gly Thr Gln Phe Leu Glu Val Gly Gln Thr  
   65                  70                  75                  80  
 Ala Ala Ala Leu Cys Ser Leu Pro Cys Gly Pro Leu Arg Tyr Asp His  
                   85                  90                  95

Leu Leu Cys Glu Ser Val Gln Ser Ser Arg Ala Thr Glu Arg Ala Cys  
 100 105 110

<210> 3236

<211> 655

<212> PRT

<213> Homo sapiens

<400> 3236

Met Pro Leu Lys Trp Lys Thr Ser Ser Pro Ala Ile Trp Arg Phe Pro  
 1 5 10 15  
 Val Pro Val Pro Lys Thr Ser Arg Ser Thr Pro Leu Ser Pro Ala Tyr  
 20 25 30  
 Ile Ser Leu Val Glu Glu Glu Asp Gln His Met Lys Leu Ser Leu Gly  
 35 40 45  
 Gly Ser Glu Met Gly Leu Ser Ser His Leu Gln Ser Ser Lys Ala Gly  
 50 55 60  
 Pro Thr Arg Ile Phe Thr Ser Asn Thr His Ser Ser Val Val Leu Gln  
 65 70 75 80  
 Gly Phe Asp Gln Leu Arg Leu Glu Gly Leu Leu Cys Asp Val Thr Leu  
 85 90 95  
 Met Pro Gly Asp Thr Asp Asp Ala Phe Pro Val His Arg Val Met Met  
 100 105 110  
 Ala Ser Ala Ser Asp Tyr Phe Lys Ala Met Phe Thr Gly Gly Met Lys  
 115 120 125  
 Glu Gln Asp Leu Met Cys Ile Lys Leu His Gly Val Ser Lys Val Gly  
 130 135 140  
 Leu Arg Lys Ile Ile Asp Phe Ile Tyr Thr Ala Lys Leu Ser Leu Asn  
 145 150 155 160  
 Met Asp Asn Leu Gln Asp Thr Leu Glu Ala Ala Ser Phe Leu Gln Ile  
 165 170 175  
 Leu Pro Val Leu Asp Phe Cys Lys Val Phe Leu Ile Ser Gly Val Thr  
 180 185 190  
 Leu Asp Asn Cys Val Glu Val Gly Arg Ile Ala Asn Thr Tyr Asn Leu  
 195 200 205



Thr Glu Val Asp Lys Tyr Val Asn Ser Phe Val Leu Lys Asn Phe Pro  
 210 215 220  
 Ala Leu Leu Ser Thr Gly Glu Phe Leu Lys Leu Pro Phe Glu Arg Leu  
 225 230 235 240  
 Ala Phe Val Leu Ser Ser Asn Ser Leu Lys His Cys Thr Glu Leu Glu  
 245 250 255  
 Leu Phe Lys Ala Thr Cys Arg Trp Leu Arg Leu Glu Glu Pro Arg Met  
 260 265 270  
 Asp Phe Ala Ala Lys Leu Met Lys Asn Ile Arg Phe Pro Leu Met Thr  
 275 280 285  
 Pro Gln Glu Leu Ile Asn Tyr Val Gln Thr Val Asp Phe Met Arg Thr  
 290 295 300  
 Asp Asn Thr Cys Val Asn Leu Leu Leu Glu Ala Ser Asn Tyr Gln Met  
 305 310 315 320  
 Met Pro Tyr Met Gln Pro Val Met Gln Ser Asp Arg Thr Ala Ile Arg  
 325 330 335  
 Ser Asp Thr Thr His Leu Val Thr Leu Gly Gly Val Leu Arg Gln Arg  
 340 345 350  
 Leu Val Val Ser Lys Glu Leu Arg Met Tyr Asp Glu Lys Ala His Glu  
 355 360 365  
 Trp Lys Ser Leu Ala Pro Met Asp Ala Pro Arg Tyr Gln His Gly Ile  
 370 375 380  
 Ala Val Ile Gly Asn Phe Leu Tyr Val Val Gly Gly Gln Ser Asn Tyr  
 385 390 395 400  
 Asp Thr Lys Gly Lys Thr Ala Val Asp Thr Val Phe Arg Phe Asp Pro  
 405 410 415  
 Arg Tyr Asn Lys Trp Met Gln Val Ala Ser Leu Asn Glu Lys Arg Thr  
 420 425 430  
 Phe Phe His Leu Ser Ala Leu Lys Gly Tyr Leu Tyr Ala Val Gly Gly  
 435 440 445  
 Arg Asn Ala Ala Gly Glu Leu Pro Thr Val Glu Cys Tyr Asn Pro Arg  
 450 455 460  
 Thr Asn Glu Trp Thr Tyr Val Ala Lys Met Ser Glu Pro His Tyr Gly  
 465 470 475 480  
 His Ala Gly Thr Val Tyr Gly Gly Val Met Tyr Ile Ser Gly Gly Ile  
 485 490 495

Thr His Asp Thr Phe Gln Lys Glu Leu Met Cys Phe Asp Pro Asp Thr  
 500 505 510  
 Asp Lys Trp Ile Gln Lys Ala Pro Met Thr Thr Val Arg Gly Leu His  
 515 520 525  
 Cys Met Cys Thr Val Gly Glu Arg Leu Tyr Val Ile Gly Gly Asn His  
 530 535 540  
 Phe Arg Gly Thr Ser Asp Tyr Asp Asp Val Leu Ser Cys Glu Tyr Tyr  
 545 550 555 560  
 Ser Pro Ile Leu Asp Gln Trp Thr Pro Ile Ala Ala Met Leu Arg Gly  
 565 570 575  
 Gln Ser Asp Val Gly Val Ala Val Phe Glu Asn Lys Ile Tyr Val Val  
 580 585 590  
 Gly Gly Tyr Ser Trp Asn Asn Arg Cys Met Val Glu Ile Val Gln Lys  
 595 600 605  
 Tyr Asp Pro Asp Lys Asp Glu Trp His Lys Val Phe Asp Leu Pro Glu  
 610 615 620  
 Ser Leu Gly Gly Ile Arg Ala Cys Thr Leu Thr Val Phe Pro Pro Glu  
 625 630 635 640  
 Glu Thr Thr Pro Ser Pro Ser Arg Glu Ser Pro Leu Ser Ala Pro  
 645 650 655

&lt;210&gt; 3237

&lt;211&gt; 608

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3237

Met Leu Leu Leu Glu Thr Gly Met Lys Glu Glu Gly Leu Phe Arg Ile  
 1 5 10 15  
 Gly Ala Gly Ala Ser Lys Leu Lys Lys Leu Lys Ala Ala Leu Asp Cys  
 20 25 30  
 Ser Thr Ser His Leu Asp Glu Phe Tyr Ser Asp Pro His Ala Val Ala  
 35 40 45  
 Gly Ala Leu Lys Ser Tyr Leu Arg Glu Leu Pro Glu Pro Leu Met Thr  
 50 55 60

Phe Asn Leu Tyr Glu Glu Trp Thr Gln Val Ala Ser Val Gln Asp Gln  
65 70 75 80  
Asp Lys Lys Leu Gln Asp Leu Trp Arg Thr Cys Gln Lys Leu Pro Pro  
85 90 95  
Gln Asn Phe Val Asn Phe Arg Tyr Leu Ile Lys Phe Leu Ala Lys Leu  
100 105 110  
Ala Gln Thr Ser Asp Val Asn Lys Met Thr Pro Ser Asn Ile Ala Ile  
115 120 125  
Val Leu Gly Pro Asn Leu Leu Trp Ala Arg Asn Glu Gly Thr Leu Ala  
130 135 140  
Glu Met Ala Ala Ala Thr Ser Val His Val Val Ala Val Ile Glu Pro  
145 150 155 160  
Ile Ile Gln His Ala Asp Trp Phe Phe Pro Glu Glu Val Glu Phe Asn  
165 170 175  
Val Ser Glu Ala Phe Val Pro Leu Thr Thr Pro Ser Ser Asn His Ser  
180 185 190  
Phe His Thr Gly Asn Asp Ser Asp Ser Gly Thr Leu Glu Arg Lys Arg  
195 200 205  
Pro Ala Ser Met Ala Val Met Glu Gly Asp Leu Val Lys Lys Glu Ser  
210 215 220  
Phe Gly Val Lys Leu Met Asp Phe Gln Ala His Arg Arg Gly Gly Thr  
225 230 235 240  
Leu Asn Arg Lys His Ile Ser Pro Ala Phe Gln Pro Pro Leu Pro Pro  
245 250 255  
Thr Asp Gly Ser Thr Val Val Pro Ala Gly Pro Glu Pro Pro Pro Gln  
260 265 270  
Ser Ser Arg Ala Glu Ser Ser Ser Gly Gly Gly Thr Val Pro Ser Ser  
275 280 285  
Ala Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly Asp Gly Cys Pro Pro  
290 295 300  
Lys Pro Lys Asp Pro Val Ser Ala Ala Val Pro Ala Pro Gly Arg Asn  
305 310 315 320  
Asn Ser Gln Ile Ala Ser Gly Gln Asn Gln Pro Gln Ala Ala Ala Gly  
325 330 335  
Ser His Gln Leu Ser Met Gly Gln Pro His Asn Ala Ala Gly Pro Ser  
340 345 350

Pro His Thr Leu Arg Arg Ala Val Lys Lys Pro Ala Pro Ala Pro Pro  
 355 360 365  
 Lys Pro Gly Asn Pro Pro Pro Gly His Pro Gly Gly Gln Ser Ser Ser  
 370 375 380  
 Gly Thr Ser Gln His Pro Pro Ser Leu Ser Pro Lys Pro Pro Thr Arg  
 385 390 395 400  
 Ser Pro Ser Pro Pro Thr Gln His Thr Gly Gln Pro Pro Gly Gln Pro  
 405 410 415  
 Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg Tyr Ser Ser Ser Leu  
 420 425 430  
 Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro Gln Pro Pro Thr Gln  
 435 440 445  
 Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser Gln Gly Pro Pro Asn  
 450 455 460  
 Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu Gln Pro Ser His Thr  
 465 470 475 480  
 Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro Pro Leu Gly Lys Gln  
 485 490 495  
 Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala Gly Gly Asn Pro Glu  
 500 505 510  
 Thr Ala Gln Pro His Ala Gly Thr Leu Pro Arg Pro Arg Pro Val Pro  
 515 520 525  
 Lys Pro Arg Asn Arg Pro Ser Val Pro Pro Pro Pro Gln Pro Pro Gly  
 530 535 540  
 Val His Ser Ala Gly Asp Ser Ser Leu Thr Asn Thr Ala Pro Thr Ala  
 545 550 555 560  
 Ser Lys Ile Val Thr Asp Ser Asn Ser Arg Val Ser Glu Pro His Arg  
 565 570 575  
 Ser Ile Phe Pro Glu Met His Ser Asp Ser Ala Ser Lys Asp Val Pro  
 580 585 590  
 Gly Arg Ile Leu Leu Asp Ile Asp Asn Asp Thr Glu Ser Thr Ala Leu  
 595 600 605

&lt;210&gt; 3238

&lt;211&gt; 510

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3238

```

Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu
  1             5             10             15
Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu
      20             25             30
Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
      35             40             45
Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg
      50             55             60
Ala Phe Gln Trp Val Ser Gln Leu Pro Val Ser Gly Val Leu Asp Arg
      65             70             75             80
Ala Thr Leu Arg Gln Met Thr Arg Pro Arg Cys Gly Val Thr Asp Thr
      85             90             95
Asn Ser Tyr Ala Ala Trp Ala Glu Arg Ile Ser Asp Leu Phe Ala Arg
      100            105            110
His Arg Thr Lys Met Arg Arg Lys Lys Arg Phe Ala Lys Gln Gly Asn
      115            120            125
Lys Trp Tyr Lys Gln His Leu Ser Tyr Arg Leu Val Asn Trp Pro Glu
      130            135            140
His Leu Pro Glu Pro Ala Val Arg Gly Ala Val Arg Ala Ala Phe Gln
      145            150            155            160
Leu Trp Ser Asn Val Ser Ala Leu Glu Phe Trp Glu Ala Pro Ala Thr
      165            170            175
Gly Pro Ala Asp Ile Arg Leu Thr Phe Phe Gln Gly Asp His Asn Asp
      180            185            190
Gly Leu Gly Asn Ala Phe Asp Gly Pro Gly Gly Ala Leu Ala His Ala
      195            200            205
Phe Leu Pro Arg Arg Gly Glu Ala His Phe Asp Gln Asp Glu Arg Trp
      210            215            220
Ser Leu Ser Arg Arg Arg Gly Arg Asn Leu Phe Val Val Leu Ala His
      225            230            235            240
Glu Ile Gly His Thr Leu Gly Leu Thr His Ser Pro Ala Pro Arg Ala
      245            250            255

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Leu Met Ala Pro Tyr Tyr Lys Arg Leu Gly Arg Asp Ala Leu Leu Ser  
 260 265 270  
 Trp Asp Asp Val Leu Ala Val Gln Ser Leu Tyr Gly Lys Pro Leu Gly  
 275 280 285  
 Gly Ser Val Ala Val Gln Leu Pro Gly Lys Leu Phe Thr Asp Phe Glu  
 290 295 300  
 Thr Trp Asp Ser Tyr Ser Pro Gln Gly Arg Arg Pro Glu Thr Gln Gly  
 305 310 315 320  
 Pro Lys Tyr Cys His Ser Ser Phe Asp Ala Ile Thr Val Gly Ser His  
 325 330 335  
 Phe Trp Glu Val Ala Ala Asp Gly Asn Val Ser Glu Pro Arg Pro Leu  
 340 345 350  
 Gln Glu Arg Trp Val Gly Leu Pro Pro Asn Ile Glu Ala Ala Ala Val  
 355 360 365  
 Ser Leu Asn Asp Gly Asp Phe Tyr Phe Phe Lys Gly Gly Arg Cys Trp  
 370 375 380  
 Arg Phe Arg Gly Pro Lys Pro Val Trp Gly Leu Pro Gln Leu Cys Arg  
 385 390 395 400  
 Ala Gly Gly Leu Pro Arg His Pro Asp Ala Ala Leu Phe Phe Pro Pro  
 405 410 415  
 Leu Arg Arg Leu Ile Leu Phe Lys Gly Ala Arg Tyr Tyr Val Leu Ala  
 420 425 430  
 Arg Gly Gly Leu Gln Val Glu Pro Tyr Tyr Pro Arg Ser Leu Gln Asp  
 435 440 445  
 Trp Gly Gly Ile Pro Glu Glu Val Ser Gly Ala Leu Pro Arg Pro Asp  
 450 455 460  
 Gly Ser Ile Ile Phe Phe Arg Asp Asp Arg Tyr Trp Arg Leu Asp Gln  
 465 470 475 480  
 Ala Lys Leu Gln Ala Thr Thr Ser Gly Arg Trp Ala Thr Glu Leu Pro  
 485 490 495  
 Trp Met Gly Cys Trp His Ala Asn Ser Gly Ser Ala Leu Phe  
 500 505 510

&lt;210&gt; 3239

&lt;211&gt; 248

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3239

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Met Pro Arg Ile Ala Gly Asn His Leu Met Leu Glu Glu Ser Arg Thr
 1             5             10             15
Cys Ser Ser Pro Glu Leu Leu Asp Gly Val Trp Pro Cys Gln Pro Leu
      20             25             30
His Phe Gly Leu Pro Ala Ser Glu Met His Phe Gln Thr Met Leu Lys
      35             40             45
Ser Lys Leu Asn Val Leu Thr Leu Lys Lys Glu Pro Leu Pro Ala Val
      50             55             60
Ile Phe His Glu Pro Glu Ala Ile Glu Leu Cys Thr Thr Thr Pro Leu
65             70             75             80
Met Lys Thr Arg Thr His Ser Gly Cys Lys Val Thr Tyr Leu Gly Lys
      85             90             95
Val Ser Thr Thr Gly Met Gln Phe Leu Ser Gly Cys Thr Glu Lys Pro
      100            105            110
Val Ile Glu Leu Trp Lys Lys His Thr Leu Ala Arg Glu Asp Val Phe
      115            120            125
Pro Ala Asn Ala Leu Leu Glu Ile Arg Pro Phe Gln Val Trp Leu His
      130            135            140
His Leu Asp His Lys Gly Glu Ala Thr Val His Met Asp Thr Phe Gln
      145            150            155            160
Val Ala Arg Ile Ala Tyr Cys Thr Ala Asp His Asn Val Ser Pro Asn
      165            170            175
Ile Phe Ala Trp Val Tyr Arg Glu Ile Asn Asp Asp Leu Ser Tyr Gln
      180            185            190
Met Asp Cys His Ala Val Glu Cys Glu Ser Lys Leu Glu Ala Lys Lys
      195            200            205
Leu Ala His Ala Met Met Glu Ala Phe Arg Lys Thr Phe His Ser Met
      210            215            220
Lys Ser Asp Gly Arg Ile His Ser Asn Ser Ser Ser Glu Glu Val Ser
      225            230            235            240
Gln Glu Leu Glu Ser Asp Asp Gly
      245

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&lt;210&gt; 3240

&lt;211&gt; 588

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3240

```

Met Asp Thr Asn Asp Asp Pro Asp Glu Asp His Leu Thr Ser Tyr Asp
  1             5             10             15
Ile Gln Leu Ser Ile Gln Glu Ser Ile Glu Ala Ser Lys Thr Ala Leu
      20             25             30
Cys Pro Glu Arg Phe Val Pro Leu Ser Ala Gln Asn Arg Lys Leu Val
      35             40             45
Glu Ala Ile Lys Gln Gly His Ile Leu Glu Leu Gln Glu Tyr Val Lys
      50             55             60
Tyr Lys Tyr Ala Met Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu
      65             70             75             80
His Glu Ala Val Val Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu
      85             90             95
Asp Ala Ser Tyr Lys Thr Leu Trp Glu Phe Lys Thr Cys Asp Gly Glu
      100            105            110
Thr Pro Leu Thr Leu Ala Val Lys Ala Gly Leu Val Glu Asn Val Arg
      115            120            125
Thr Leu Leu Glu Lys Gly Val Trp Pro Asn Thr Lys Asn Asp Lys Gly
      130            135            140
Glu Thr Pro Leu Leu Ile Ala Val Lys Lys Gly Ser Tyr Asp Met Val
      145            150            155            160
Ser Thr Leu Ile Lys His Asn Thr Ser Leu Asp Gln Pro Cys Val Lys
      165            170            175
Arg Trp Ser Ala Met His Glu Ala Ala Lys Gln Gly Arg Lys Asp Ile
      180            185            190
Val Ala Leu Leu Leu Lys His Gly Gly Asn Val His Leu Arg Asp Gly
      195            200            205
Phe Gly Val Thr Pro Leu Gly Val Ala Ala Glu Tyr Gly His Cys Asp

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210	215	220	
Val Leu Glu His Leu Ile His Lys Gly Gly Asp Val Leu Ala Leu Ala			
225	230	235	240
Asp Asp Gly Ala Ser Val Leu Phe Glu Ala Ala Gly Gly Gly Asn Pro			
245	250	255	
Asp Cys Ile Ser Leu Leu Leu Glu Tyr Gly Gly Ser Gly Asn Val Pro			
260	265	270	
Asn Arg Ala Gly His Leu Pro Ile His Arg Ala Ala Tyr Glu Gly His			
275	280	285	
Tyr Leu Ala Leu Lys Tyr Leu Ile Pro Val Thr Ser Lys Asn Ala Ile			
290	295	300	
Arg Lys Ser Gly Leu Thr Pro Ile His Ser Ala Ala Asp Gly Gln Asn			
305	310	315	320
Ala Gln Cys Leu Glu Leu Leu Ile Glu Asn Gly Phe Asp Val Asn Thr			
325	330	335	
Leu Leu Ala Asp His Ile Ser Gln Ser Cys Asp Asp Glu Arg Lys Thr			
340	345	350	
Ala Leu Tyr Phe Ala Val Ser Asn Asn Asp Val His Cys Thr Glu Val			
355	360	365	
Leu Leu Ala Ala Gly Ala Asp Pro Asn Leu Asp Pro Leu Asn Cys Leu			
370	375	380	
Leu Val Ala Val Arg Ala Asn Asn Tyr Glu Ile Val Arg Leu Leu Leu			
385	390	395	400
Ser His Gly Ala Asn Val Asn Cys Tyr Phe Met His Val Asn Asp Thr			
405	410	415	
Arg Phe Pro Ser Val Ile Gln Tyr Ala Leu Asn Asp Glu Val Met Leu			
420	425	430	
Arg Leu Leu Leu Asn Asn Gly Tyr Gln Val Glu Met Cys Phe Asp Cys			
435	440	445	
Met His Gly Asp Ile Phe Gly Asn Ser Phe Val Trp Ser Glu Ile Gln			
450	455	460	
Glu Glu Val Leu Pro Gly Trp Thr Ser Cys Val Ile Lys Asp Asn Pro			
465	470	475	480
Phe Cys Glu Phe Ile Thr Val Pro Trp Met Lys His Leu Val Gly Arg			
485	490	495	
Val Thr Arg Val Leu Ile Asp Tyr Met Asp Tyr Val Pro Leu Cys Ala			

500                      505                      510  
 Lys Leu Lys Ser Ala Leu Glu Val Gln Arg Glu Trp Pro Glu Ile Arg  
          515                      520                      525  
 Gln Ile Leu Glu Asn Pro Cys Ser Leu Lys His Leu Cys Arg Leu Lys  
          530                      535                      540  
 Ile Arg Arg Leu Met Gly Leu Gln Lys Leu Cys Gln Pro Ala Ser Val  
 545                      550                      555                      560  
 Glu Lys Leu Pro Leu Pro Pro Ala Ile Gln Arg Tyr Ile Leu Phe Lys  
                          565                      570                      575  
 Glu Tyr Asp Leu Tyr Gly Gln Glu Leu Lys Leu Thr  
                          580                      585

<210> 3241

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3241

Met Gln Gly Leu Ser Val Cys Leu Ser Phe Ser Leu Arg Asn Glu Asn  
   1                      5                      10                      15  
 Pro Asp Leu Arg Ala Val Gln Leu Arg Ala His Tyr Leu Pro Ser Pro  
                          20                      25                      30  
 Ser Arg Pro Gln Pro His His Pro Thr Cys Pro Leu Pro Pro Thr Ser  
                          35                      40                      45  
 Ser Gly Ala Phe Ser Arg Cys Leu Met Val Gly Gly Phe Leu Met Gly  
                          50                      55                      60  
 Gln Glu Arg Arg Ala Ser Ser Cys Asp Ser Thr Val Trp Val Lys Cys  
                          65                      70                      75                      80  
 Pro Val Arg Ala Trp Cys Gly Glu Leu Ala Ser Glu Glu Pro Leu Val  
                          85                      90                      95  
 Gly Lys Arg Glu Val Gly  
                          100

<210> 3242

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3242

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Met Glu Arg Gln Pro Gly Pro Val Arg Gly Lys Leu Gln Ile Phe Gln
  1             5             10             15
Lys Thr Glu Lys Asp Pro Gln Ala Arg Ala Gly Ser Pro Val Gln Glu
      20             25             30
Tyr His Thr Ala Leu Val Ala Gly Asp Leu Asp His Leu Lys Pro Leu
      35             40             45
Met Asp Gln Phe Phe Gln Asp Ala Asn Val Val Phe Glu Ile Asn Lys
      50             55             60
Asp Glu Met Glu Trp Gln Val Lys Ser Pro Ala Thr Phe Gly Leu Ser
      65             70             75             80
Gly Leu Trp Thr Leu Glu Tyr Lys Arg Glu Leu Thr Thr Pro Leu Cys
      85             90             95
Ile Ala Ala Ala His Gly His Thr Ala Cys Val Arg His Leu Leu Gly
      100            105            110
Arg Gly Ala Asp Pro Asp Ala Ser Pro Ala Gly Pro Arg Val Pro Asp
      115            120            125
Arg Ile Leu Arg Ser Pro Gly Leu Thr Ala Ala His Gly Ala Gly Ala
      130            135            140
Ala Gln Pro Arg Leu Ser His Arg Val Ala Arg Arg Leu Pro Gln Gly
      145            150            155            160
Ala Glu Asp Leu Cys Ile Cys Pro Arg Ser His Arg Gly Ala Phe Gln
      165            170            175
Leu Leu Pro Ser Ala Leu Leu Val Arg Val Leu Glu Gly Ser Asp Ser
      180            185            190

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&lt;210&gt; 3243

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3243

Met Met Ser Ser Val Ser Thr Glu Ser Lys Leu Gln Gln Ala Val Ser  
 1 5 10 15  
 Leu Gln Gly Val Asp Pro Glu Thr Cys Met Ile Val Phe Lys Asn His  
 20 25 30  
 Trp Ala Gln Val Val Lys Ile Leu Glu Lys His Asp Pro Leu Lys Asn  
 35 40 45  
 Thr Gln Ala Lys Tyr Gly Ser Ile Pro Pro Asp Glu Ala Ser Ala Val  
 50 55 60  
 Gln Asn Tyr Val Glu His Met Leu Phe Leu Leu Ile Glu Glu Gln Ala  
 65 70 75 80  
 Lys Asp Ala Ala Met Gly Pro Ile Leu Glu Phe Val Val Ser Glu Asn  
 85 90 95  
 Ile Met Glu Lys Leu Phe Leu Trp Ser Leu Arg Arg Glu Phe Thr Asp  
 100 105 110  
 Glu Thr Lys Ile Glu Gln Leu Lys Met Tyr Glu Met Leu Val Thr Gln  
 115 120 125  
 Ser His Gln Pro Leu Leu His His Lys Pro Ile Leu Lys Pro Leu Met  
 130 135 140  
 Met Leu Leu Ser Ser Cys Ser Gly Thr Thr Thr Pro Thr Val Glu Glu  
 145 150 155 160  
 Lys Leu Val Val Leu Leu Asn Gln Leu Cys Ser Ile Leu Ala Lys Asp  
 165 170 175  
 Pro Ser Ile Leu Glu Leu Phe Phe His Thr Ser Glu Asp Gln Gly Ala  
 180 185 190  
 Ala Asn Phe Leu Ile Phe Ser Leu Leu Ile Pro Phe Ile His Arg Glu  
 195 200 205  
 Gly Ser Val Gly Gln Gln Ala Arg Asp Ala Leu Leu Phe Ile Met Ser  
 210 215 220  
 Leu Ser Ala Glu Asn Thr Met Val Ala His His Ile Val Glu Asn Thr  
 225 230 235 240  
 Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Gly Leu Tyr Ser Ser  
 245 250 255  
 Leu Pro Thr Lys Leu Glu Asp Glu Glu Asp Asp Phe Asp Ser Phe Ile  
 260 265 270  
 Ala Glu Met Pro Ala Val Glu Thr Val Pro Ser Pro Phe Val Gly Arg

275                      280                      285  
 Asp Glu Ala Ala Phe Ala Ser Arg His Pro Val Arg Thr Gln Ser Thr  
 290                      295                      300  
 Pro Phe Thr Gly Pro Phe Ile Ser Val Val Leu  
 305                      310                      315

<210> 3244

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3244

Met Leu Asp Gly Leu Gln Arg Leu Arg Ser Gln Pro Lys Leu Ala Asp  
 1                      5                      10                      15  
 Val Thr Leu Leu Val Gly Gly Arg Glu Leu Pro Cys His Arg Gly Leu  
 20                      25                      30  
 Leu Ala Leu Ser Ser Pro Tyr Phe His Ala Met Phe Ala Gly Asp Phe  
 35                      40                      45  
 Ala Glu Ser Phe Ser Ala Arg Val Glu Leu Arg Asp Val Glu Pro Ala  
 50                      55                      60  
 Val Val Gly Gln Leu Val Asp Phe Val Tyr Thr Gly Arg Leu Thr Ile  
 65                      70                      75                      80  
 Thr Gln Gly Asn Val Glu Ala Leu Thr Arg Thr Ala Ala Arg Leu His  
 85                      90                      95  
 Phe Pro Ser Val Gln Lys Val Cys Gly Arg Tyr Leu Gln Gln Gln Leu  
 100                      105                      110  
 Asp Ala Ala Asn Cys Leu Gly Ile Cys Glu Phe Gly Glu Gln Gln Gly  
 115                      120                      125  
 Leu Leu Gly Val Ala Ala Lys Ala Trp Ala Phe Leu Arg Glu Asn Phe  
 130                      135                      140  
 Glu Ala Val Ala Arg Glu Asp Glu Phe Leu Gln Leu Pro Arg Glu Arg  
 145                      150                      155                      160  
 Leu Val Thr Cys Leu Ala Gly Asp Leu Leu Gln Val Gln Pro Glu Gln  
 165                      170                      175  
 Gly Arg Leu Glu Ala Leu Met Arg Trp Val Arg His Asp Pro Gln Ala

180	185	190
Arg Ala Val His Leu Pro Glu	Leu Leu Ser Leu Val His Leu Asp Ala	
195	200	205
Val Pro Arg Pro Cys Val Gln Gln Leu Leu Ala Ser Glu Pro Leu Ile		
210	215	220
Gln Glu Ser Glu Ala Cys Arg Ala Ala Leu Ser Gln Gly His Asp Gly		
225	230	235
Ala Pro Leu Ala Leu Gln Gln Lys Leu Glu Glu Val Leu Val Val Val		
245	250	255
Gly Gly Gln Ala Leu Glu Glu Glu Glu Ala Gly Glu Glu Pro Thr Pro		
260	265	270
Gly Leu Gly Asn Phe Ala Phe Tyr Asn Ser Lys Ala Lys Arg Trp Met		
275	280	285
Ala Leu Pro Asp Phe Pro Asp Tyr His Lys		
290	295	

&lt;210&gt; 3245

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3245

Met Cys Arg Cys Arg Arg Tyr Arg Arg Arg Gly Arg Val Trp Gly Gly
1 5 10 15
Ala Gly Asp Ser Arg Ala Ala Gly Asn Arg Ser Gly Ser Gly Ala Ala
20 25 30
Pro Gly Leu Arg Trp Gly Gly Val Arg His Trp Pro His Leu Val Ile
35 40 45
Pro Ala Ala His Arg Pro Gln Phe Pro Arg Leu Leu Asn Gly Tyr Ala
50 55 60
Gly Gly Ala Thr Gly Trp Ile Trp Ile Arg Ile Arg Gly Ile Gly Ile
65 70 75 80
Gly Ala Ser Cys Val Leu Gly Val Ser Cys Asn Leu Glu Leu Gly Val
85 90 95
Ala Arg Phe Val Pro Gln Phe Pro Cys Ile Val Gly Asp Gly Ala

100

105

110

&lt;210&gt; 3246

&lt;211&gt; 676

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3246

Met Glu Pro Arg Gly Gly Gly Ser Ser Gln Phe Ser Ser Cys Pro Gly  
 1 5 10 15  
 Pro Ala Ser Ser Gly Asp Gln Met Gln Arg Leu Leu Gln Gly Pro Ala  
 20 25 30  
 Pro Arg Pro Pro Gly Glu Pro Pro Gly Ser Pro Lys Ser Pro Gly His  
 35 40 45  
 Ser Thr Gly Ser Gln Arg Pro Pro Asp Ser Pro Gly Ala Pro Pro Arg  
 50 55 60  
 Ser Pro Ser Arg Lys Lys Arg Arg Ala Val Gly Ala Lys Gly Gly Gly  
 65 70 75 80  
 His Thr Gly Ala Ser Ala Ser Ala Gln Thr Gly Ser Pro Leu Leu Pro  
 85 90 95  
 Ala Ala Ser Pro Glu Thr Ala Lys Leu Met Ala Lys Ala Gly Gln Glu  
 100 105 110  
 Glu Leu Gly Pro Gly Pro Ala Gly Ala Pro Glu Pro Gly Pro Arg Ser  
 115 120 125  
 Pro Val Gln Glu Asp Arg Pro Gly Pro Gly Leu Gly Leu Ser Thr Pro  
 130 135 140  
 Val Pro Val Thr Glu Gln Gly Thr Asp Gln Ile Arg Thr Pro Arg Arg  
 145 150 155 160  
 Ala Lys Leu His Thr Val Ser Thr Thr Val Trp Glu Ala Leu Pro Asp  
 165 170 175  
 Val Ser Arg Ala Lys Ser Asp Met Ala Val Ser Thr Pro Ala Ser Glu  
 180 185 190  
 Pro Gln Pro Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro  
 195 200 205  
 Gln Ser Asp Arg Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro Gln

210	215	220	
Pro Asp Thr Asp Met Ala Val Ser Thr Pro Ala Ser Glu Pro Gln Pro			
225	230	235	240
Asp Arg Asp Met Ala Val Ser Ile Pro Ala Ser Lys Pro Gln Ser Asp			
	245	250	255
Thr Ala Val Ser Thr Pro Ala Ser Glu Pro Gln Ser Ser Val Ala Leu			
	260	265	270
Ser Thr Pro Ile Ser Lys Pro Gln Leu Asp Thr Asp Val Ala Val Ser			
	275	280	285
Thr Pro Ala Ser Lys His Gly Leu Asp Val Ala Leu Pro Thr Ala Gly			
290	295	300	
Pro Val Ala Lys Leu Glu Val Ala Ser Ser Pro Pro Val Ser Glu Ala			
305	310	315	320
Val Pro Arg Met Thr Glu Ser Ser Gly Leu Val Ser Thr Pro Val Pro			
	325	330	335
Arg Ala Asp Ala Ala Gly Leu Ala Trp Pro Pro Thr Arg Arg Ala Gly			
	340	345	350
Pro Asp Val Val Glu Met Glu Ala Val Val Ser Glu Pro Ser Ala Gly			
	355	360	365
Ala Pro Gly Cys Cys Ser Gly Ala Pro Ala Leu Gly Leu Thr Gln Val			
370	375	380	
Pro Arg Lys Lys Lys Val Arg Phe Ser Val Ala Gly Pro Gly Pro Asn			
385	390	395	400
Lys Pro Gly Ser Gly Gln Ala Ser Ala Arg Pro Ser Ala Leu Gln Thr			
	405	410	415
Ala Thr Gly Ala His Gly Gly Pro Gly Ala Trp Glu Ala Val Ala Val			
	420	425	430
Gly Pro Arg Pro His Gln Pro Arg Ile Leu Lys His Leu Pro Arg Pro			
	435	440	445
Pro Pro Ser Ala Val Thr Arg Val Gly Pro Gly Ser Ser Phe Ala Val			
450	455	460	
Thr Leu Pro Glu Ala Tyr Glu Phe Phe Phe Cys Asp Thr Ile Glu Glu			
465	470	475	480
Asn Glu Glu Ala Glu Ala Ala Ala Ala Gly Gln Asp Pro Ala Gly Val			
	485	490	495
Gln Trp Pro Asp Ile Cys Glu Phe Phe Phe Pro Asp Val Gly Ala Gln			



500	505	510
Arg Ser Arg Arg Arg Gly Ser Pro Glu Pro Leu Pro Arg Ala Asp Pro		
515	520	525
Val Pro Ala Pro Ile Pro Gly Asp Pro Val Pro Ile Ser Ile Pro Glu		
530	535	540
Val Tyr Glu His Phe Phe Phe Gly Glu Asp Arg Leu Glu Gly Val Leu		
545	550	555
Gly Pro Ala Val Pro Leu Pro Leu Gln Ala Leu Glu Pro Pro Arg Ser		
565	570	575
Ala Ser Glu Gly Ala Gly Pro Gly Thr Pro Leu Lys Pro Ala Val Val		
580	585	590
Glu Arg Leu His Leu Ala Leu Arg Arg Ala Gly Glu Leu Arg Gly Pro		
595	600	605
Val Pro Ser Ser Ala Phe Ser Gln Asn Asp Met Cys Leu Val Phe Val		
610	615	620
Ala Phe Ala Thr Trp Ala Val Arg Thr Ser Asp Pro His Thr Pro Asp		
625	630	635
Ala Trp Lys Thr Ala Leu Leu Ala Asn Val Gly Thr Ile Ser Ala Ile		
645	650	655
Arg Tyr Phe Arg Arg Gln Val Gly Gln Gly Arg Arg Ser His Ser Pro		
660	665	670
Ser Pro Ser Ser		
675		

&lt;210&gt; 3247

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3247

Met Ser Ser Asn Gln Cys Pro Gly Val His Gly Ser Ser Leu Ala Tyr
1 5 10 15
Cys Ser Gly Leu His Ser Leu Gly His Cys Cys Leu Cys Arg Tyr Lys
20 25 30
Lys Lys Lys Lys Glu Lys Gln Lys Lys Glu Gly Thr Ala Ala Ser Gln

35 40 45  
 Asn Val Asn Gln Asn Ile Ser Leu Trp Tyr Trp Glu Arg Lys Arg Arg  
 50 55 60  
 Phe Pro Arg Glu Asp Glu Asp Gln Thr Asp Cys Arg Pro Ala Ile Ser  
 65 70 75 80  
 Leu His Cys Thr Trp Ile Gly His Leu Leu Tyr Ala Pro Gly Lys Lys  
 85 90 95  
 Ile Gln Arg Thr Met Leu Leu  
 100

<210> 3248

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3248

Met Ala Asp His Asn Pro Asp Ser Asp Ser Thr Pro Arg Thr Leu Leu  
 1 5 10 15  
 Arg Arg Val Leu Asp Thr Ala Asp Pro Arg Thr Pro Arg Arg Pro Arg  
 20 25 30  
 Ser Ala Arg Ala Gly Ala Arg Arg Ala Leu Leu Glu Thr Ala Ser Pro  
 35 40 45  
 Arg Lys Leu Ser Gly Gln Thr Arg Thr Ile Ala Arg Gly Arg Ser His  
 50 55 60  
 Gly Ala Arg Val Ser Thr Gln Pro Thr Asp Pro Lys Gly Pro Trp Leu  
 65 70 75 80  
 Pro Arg Gly Gly Gly Leu Arg Ser Ser Ser Ala Leu Glu Pro Thr Leu  
 85 90 95  
 Arg Lys Ser Gln Gly Arg Arg Thr Asp Trp Leu Leu Gly Ala Leu Pro  
 100 105 110  
 Ile Val Cys Trp Gln Ile Gly Pro Tyr Ser Gly Gln Trp Ala Leu Gly  
 115 120 125  
 Gly Thr Asp Thr Ser Asp Ala Ala Glu Glu His Pro Thr Asn Trp  
 130 135 140

&lt;210&gt; 3249

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3249

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Met Lys Glu Lys Ile Leu Arg Ala Ala Arg Glu Lys Gly Arg Ala Thr
  1             5             10             15
His Lys Gly Lys Pro Ile Ser Leu Thr Ala Asp Leu Ser Thr Glu Thr
          20             25             30
Leu Gln Ala Arg Arg Glu Trp Gly Pro Ile Phe Asn Ile Leu Lys Glu
          35             40             45
Lys Asn Phe Gln Pro Arg Ile Ser Tyr Pro Ala Lys Leu Ser Phe Ile
          50             55             60
Ser Glu Gly Glu Ile Lys Ser Phe Thr Asp Lys Arg Ile Leu Arg Asp
          65             70             75             80
Phe Val Thr Thr Arg Pro Ala Leu Gln Gly Leu Leu Lys Glu Ala Leu
          85             90             95
Asn Met Glu Arg Lys Asn Trp
          100

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&lt;210&gt; 3250

&lt;211&gt; 367

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3250

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Met Arg Gln Lys Ile Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys
  1             5             10             15
Thr Gly Phe Ile Ala Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys
          20             25             30
Gln Gln Phe Ser Thr Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg
          35             40             45
Pro Gly Thr Gln Met Val Cys Thr Phe Cys Pro Pro Pro Leu Pro Lys

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50	55	60	
Pro Ser Ser Thr Thr	Pro Thr Pro Leu Val	Ser Glu Thr Gly Gly Asn	
65	70	75	80
Ser Pro Ser Asp Lys Val	Asp Asn Glu Leu Lys Asn	Leu Glu His Leu	
85	90	95	
Ser Ser Phe Ser Ser Asp	Glu Asp Asp Pro Gly Tyr	Ser Gln Asp Ala	
100	105	110	
Tyr Lys Ser Val Ser Thr	Pro Leu Thr Thr Leu Asp	Ala Thr Ser Asp	
115	120	125	
Lys Lys Lys Lys Thr Glu	Ala Leu Gln Val Ala Thr	Thr Ser Pro Thr	
130	135	140	
Ala Asn Thr Thr Gly Thr	Ala Thr Thr Ser Ser Thr	Thr Val Gly Ala	
145	150	155	160
Val Lys Gln Glu Pro Leu	His Ser Thr Ser Tyr Ala	Val Asn Ile Leu	
165	170	175	
Glu Asn Ile Ser Ser Ser	Glu Ser Ser Lys Pro Ile	Glu Leu Asp Gly	
180	185	190	
Leu Pro Ser Asp Gln Phe	Ala Lys Gly Gln Asp Thr	Val Ala Ile Glu	
195	200	205	
Gly Phe Thr Asp Glu Glu	Asp Thr Glu Ser Gly Gly	Glu Gly Gln Tyr	
210	215	220	
Arg Glu Arg Asp Glu Phe	Val Val Lys Ile Glu Asp	Ile Glu Thr Phe	
225	230	235	240
Lys Glu Ala Leu Lys Thr	Gly Lys Glu Pro Pro Ala	Ile Trp Lys Val	
245	250	255	
Gln Lys Ala Leu Leu Gln	Lys Phe Val Pro Val Ile	Arg Asp Gly Gln	
260	265	270	
Arg Glu Phe Ala Ala Thr	Asn Ser Tyr Leu Gly Tyr	Phe Gly Asp Ala	
275	280	285	
Lys Ser Lys Tyr Lys Arg	Ile Tyr Val Lys Phe Ile	Glu Asn Ala Asn	
290	295	300	
Lys Lys Glu Tyr Val Arg	Val Cys Ser Lys Lys Pro	Arg Asn Lys Pro	
305	310	315	320
Ser Gln Thr Ile Arg Thr	Val Gln Ala Lys Pro Ser	Ser Ser Ser Lys	
325	330	335	
Thr Ser Asp Pro Leu Ala	Ser Lys Thr Thr Thr	Lys Ala Pro Ser	

340                      345                      350  
 Val Lys Pro Lys Val Lys Gln Pro Lys Val Lys Ala Glu Pro Pro  
 355                      360                      365

<210> 3251

<211> 1367

<212> PRT

<213> Homo sapiens

<400> 3251

Met Gly Asn Ser Asp Ser Gln Tyr Thr Leu Gln Gly Ser Lys Asn His  
 1                      5                      10                      15  
 Ser Asn Thr Ile Thr Gly Ala Lys Gln Ile Pro Cys Ser Leu Lys Ile  
 20                      25                      30  
 Arg Gly Ile His Ala Lys Glu Glu Lys Ser Leu His Gly Trp Gly His  
 35                      40                      45  
 Gly Ser Asn Gly Ala Gly Tyr Lys Ser Arg Ser Leu Ala Arg Ser Cys  
 50                      55                      60  
 Leu Ser His Phe Lys Ser Asn Gln Pro Tyr Ala Ser Arg Leu Gly Gly  
 65                      70                      75                      80  
 Pro Thr Cys Lys Val Ser Arg Gly Val Ala Tyr Ser Thr His Arg Thr  
 85                      90                      95  
 Asn Ala Pro Gly Lys Asp Phe Gln Gly Ile Ser Ala Ala Phe Ser Thr  
 100                      105                      110  
 Glu Asn Gly Phe His Ser Val Gly His Glu Leu Ala Asp Asn His Ile  
 115                      120                      125  
 Thr Ser Arg Asp Cys Asn Gly His Leu Leu Asn Cys Tyr Gly Arg Asn  
 130                      135                      140  
 Glu Ser Ile Ala Ser Thr Pro Pro Gly Glu Asp Arg Lys Ser Pro Arg  
 145                      150                      155                      160  
 Val Leu Ile Lys Thr Leu Gly Lys Leu Asp Gly Cys Leu Arg Val Glu  
 165                      170                      175  
 Phe His Asn Gly Gly Asn Pro Ser Lys Val Pro Ala Glu Asp Cys Ser  
 180                      185                      190  
 Glu Pro Val Gln Leu Leu Arg Tyr Ser Pro Thr Leu Ala Ser Glu Thr

195	200	205
Ser Pro Val Pro Glu Ala Arg Arg Gly Ser Ser Ala Asp Ser Leu Pro		
210	215	220
Ser His Arg Pro Ser Pro Thr Asp Ser Arg Leu Arg Ser Ser Lys Gly		
225	230	235
Ser Ser Leu Ser Ser Glu Ser Ser Trp Tyr Asp Ser Pro Trp Gly Asn		
245	250	255
Ala Gly Glu Leu Ser Glu Ala Glu Gly Ser Phe Leu Ala Pro Gly Met		
260	265	270
Pro Asp Pro Ser Leu His Ala Ser Phe Pro Pro Gly Asp Ala Lys Lys		
275	280	285
Pro Phe Asn Gln Ser Ser Ser Leu Ser Ser Leu Arg Glu Leu Tyr Lys		
290	295	300
Asp Ala Asn Leu Gly Ser Leu Ser Pro Ser Gly Ile Arg Leu Ser Asp		
305	310	315
Glu Tyr Met Gly Thr His Ala Ser Leu Ser Asn His Val Ser Phe Ala		
325	330	335
Ser Asp Ile Asp Val Pro Ser Arg Val Ala His Gly Asp Pro Ile Gln		
340	345	350
Tyr Ser Ser Phe Thr Leu Pro Cys Arg Lys Pro Lys Ala Phe Val Glu		
355	360	365
Asp Thr Ala Lys Lys Asp Ser Leu Lys Ala Arg Met Arg Arg Ile Ser		
370	375	380
Asp Trp Thr Gly Ser Leu Ser Arg Lys Lys Arg Lys Leu Gln Glu Pro		
385	390	395
Arg Ser Lys Glu Gly Ser Asp Tyr Phe Asp Ser Arg Ser Asp Gly Leu		
405	410	415
Asn Thr Asp Val Gln Gly Ser Ser Gln Ala Ser Ala Phe Leu Trp Ser		
420	425	430
Gly Gly Ser Thr Gln Ile Leu Ser Gln Arg Ser Glu Ser Thr His Ala		
435	440	445
Ile Gly Ser Asp Pro Leu Arg Gln Asn Ile Tyr Glu Asn Phe Met Arg		
450	455	460
Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr Ser Thr		
465	470	475
Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu Gln Leu		
		480

485	490	495
Asp Leu Leu Phe Glu Lys Glu Gln Gly Val Val Arg Lys Ala Gly Trp		
500	505	510
Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys Leu Glu		
515	520	525
Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu Lys Gly		
530	535	540
Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met Asp Gln		
545	550	555
Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser Ile Val Gln		
565	570	575
Ser Val Pro Glu His Pro Lys Lys Glu Asn Val Phe Cys Leu Ser Asn		
580	585	590
Ser Phe Gly Asp Val Tyr Leu Phe Gln Ala Thr Ser Gln Thr Asp Leu		
595	600	605
Glu Asn Trp Val Thr Ala Val His Ser Ala Cys Ala Ser Leu Phe Ala		
610	615	620
Lys Lys His Gly Lys Glu Asp Thr Leu Arg Leu Leu Lys Asn Gln Thr		
625	630	635
Lys Asn Leu Leu Gln Lys Ile Asp Met Asp Ser Lys Met Lys Lys Met		
645	650	655
Ala Glu Leu Gln Leu Ser Val Val Ser Asp Pro Lys Asn Arg Lys Ala		
660	665	670
Ile Glu Asn Gln Ile Gln Gln Trp Glu Gln Asn Leu Glu Lys Phe His		
675	680	685
Met Asp Leu Phe Arg Met Arg Cys Tyr Leu Ala Ser Leu Gln Gly Gly		
690	695	700
Glu Leu Pro Asn Pro Lys Ser Leu Leu Ala Ala Ala Ser Arg Pro Ser		
705	710	715
Lys Leu Ala Leu Gly Arg Leu Gly Ile Leu Ser Val Ser Ser Phe His		
725	730	735
Ala Leu Val Cys Ser Arg Asp Asp Ser Ala Leu Arg Lys Arg Thr Leu		
740	745	750
Ser Leu Thr Gln Arg Gly Arg Asn Lys Lys Gly Ile Phe Ser Ser Leu		
755	760	765
Lys Gly Leu Asp Thr Leu Ala Arg Lys Gly Lys Glu Lys Arg Pro Ser		

770	775	780	
Ile Thr Gln Val Asp Glu Leu Leu His Ile Tyr Gly Ser Thr Val Asp			
785	790	795	800
Gly Val Pro Arg Asp Asn Ala Trp Glu Ile Gln Thr Tyr Val His Phe			
805	810	815	
Gln Asp Asn His Gly Val Thr Val Gly Ile Lys Pro Glu His Arg Val			
820	825	830	
Glu Asp Ile Leu Thr Leu Ala Cys Lys Met Arg Gln Leu Glu Pro Ser			
835	840	845	
His Tyr Gly Leu Gln Leu Arg Lys Leu Val Asp Asp Asn Val Glu Tyr			
850	855	860	
Cys Ile Pro Ala Pro Tyr Glu Tyr Met Gln Gln Gln Val Tyr Asp Glu			
865	870	875	880
Ile Glu Val Phe Pro Leu Asn Val Tyr Asp Val Gln Leu Thr Lys Thr			
885	890	895	
Gly Ser Val Cys Asp Phe Gly Phe Ala Val Thr Ala Gln Val Asp Glu			
900	905	910	
Arg Gln His Leu Ser Arg Ile Phe Ile Ser Asp Val Leu Pro Asp Gly			
915	920	925	
Leu Ala Tyr Gly Glu Gly Leu Arg Lys Gly Asn Glu Ile Met Thr Leu			
930	935	940	
Asn Gly Glu Ala Val Ser Asp Leu Asp Leu Lys Gln Met Glu Ala Leu			
945	950	955	960
Phe Ser Glu Lys Ser Val Gly Leu Thr Leu Ile Ala Arg Pro Pro Asp			
965	970	975	
Thr Lys Ala Thr Leu Cys Thr Ser Trp Ser Asp Ser Asp Leu Phe Ser			
980	985	990	
Arg Asp Gln Lys Ser Leu Leu Pro Pro Pro Asn Gln Ser Gln Leu Leu			
995	1000	1005	
Glu Glu Phe Leu Asp Asn Phe Lys Lys Asn Thr Ala Asn Asp Phe Ser			
1010	1015	1020	
Asn Val Pro Asp Ile Thr Thr Gly Leu Lys Arg Ser Gln Thr Asp Gly			
1025	1030	1035	1040
Thr Leu Asp Gln Val Ser His Arg Glu Lys Met Glu Gln Thr Phe Arg			
1045	1050	1055	
Ser Ala Glu Gln Ile Thr Ala Leu Cys Arg Ser Phe Asn Asp Ser Gln			



1060	1065	1070
Ala Asn Gly Met Glu Gly Pro Arg Glu Asn Gln Asp Pro Pro Pro Arg		
1075	1080	1085
Pro Leu Ala Arg His Leu Ser Asp Ala Asp Arg Leu Arg Lys Val Ile		
1090	1095	1100
Gln Glu Leu Val Asp Thr Glu Lys Ser Tyr Val Lys Asp Leu Ser Cys		
1105	1110	1115
Leu Phe Glu Leu Tyr Leu Glu Pro Leu Gln Asn Glu Thr Phe Leu Thr		
1125	1130	1135
Gln Asp Glu Met Glu Ser Leu Phe Gly Ser Leu Pro Glu Met Leu Glu		
1140	1145	1150
Phe Gln Lys Val Phe Leu Glu Thr Leu Glu Asp Gly Ile Ser Ala Ser		
1155	1160	1165
Ser Asp Phe Asn Thr Leu Glu Thr Pro Ser Gln Phe Arg Lys Leu Leu		
1170	1175	1180
Phe Ser Leu Gly Gly Ser Phe Leu Tyr Tyr Ala Asp His Phe Lys Leu		
1185	1190	1195
Tyr Ser Gly Phe Cys Ala Asn His Ile Lys Val Gln Lys Val Leu Glu		
1205	1210	1215
Arg Ala Lys Thr Asp Lys Ala Phe Lys Ala Phe Leu Asp Ala Arg Asn		
1220	1225	1230
Pro Thr Lys Gln His Ser Ser Thr Leu Glu Ser Tyr Leu Ile Lys Pro		
1235	1240	1245
Val Gln Arg Val Leu Lys Tyr Pro Leu Leu Leu Lys Glu Leu Val Ser		
1250	1255	1260
Leu Thr Asp Gln Glu Ser Glu Glu His Tyr His Leu Thr Glu Ala Leu		
1265	1270	1275
Lys Ala Met Glu Lys Val Ala Ser His Ile Asn Glu Met Gln Lys Ile		
1285	1290	1295
Tyr Glu Asp Tyr Gly Thr Val Phe Asp Arg Leu Val Ala Glu Gln Ser		
1300	1305	1310
Gly Thr Glu Lys Glu Val Thr Glu Leu Ser Met Gly Glu Leu Leu Met		
1315	1320	1325
His Ser Thr Val Ser Trp Leu Asn Pro Phe Leu Ser Leu Gly Lys Ala		
1330	1335	1340

Arg Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile  
1345                      1350                      1355                      1360

Leu Val Tyr Lys Glu Asn Cys  
1365

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<210> 3252
<211> 238
<212> PRT
<213> Homo sapiens
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<400> 3252

Met	Ile	Ser	Ser	Tyr	Leu	Val	Cys	Leu	Phe	Thr	Asp	Thr	Ile	Arg	Tyr
1				5					10					15	
Leu	Ser	Leu	His	Asp	Asn	Lys	Tyr	Ile	Arg	Tyr	Phe	Pro	Gly	His	Ser
			20					25					30		
Lys	Arg	Val	Val	Ala	Leu	Ser	Met	Ser	Pro	Val	Asp	Asp	Thr	Phe	Ile
		35					40					45			
Ser	Gly	Ser	Leu	Asp	Lys	Thr	Ile	Arg	Leu	Trp	Asp	Leu	Arg	Ser	Pro
	50					55					60				
Asn	Cys	Gln	Gly	Leu	Met	His	Leu	Gln	Gly	Lys	Pro	Val	Cys	Ser	Phe
65					70					75					80
Asp	Pro	Glu	Gly	Leu	Ile	Phe	Ala	Ala	Gly	Val	Asn	Ser	Glu	Met	Val
				85					90					95	
Lys	Leu	Tyr	Asp	Leu	Arg	Ser	Phe	Asp	Lys	Gly	Pro	Phe	Ala	Thr	Phe
		100						105					110		
Lys	Met	Gln	Tyr	Asp	Arg	Thr	Cys	Glu	Trp	Thr	Gly	Leu	Lys	Phe	Ser
	115						120					125			
Asn	Asp	Gly	Lys	Leu	Ile	Leu	Ile	Ser	Thr	Asn	Gly	Ser	Phe	Ile	Arg
	130					135					140				
Leu	Ile	Asp	Ala	Phe	Lys	Gly	Val	Val	Met	His	Thr	Phe	Gly	Gly	Tyr
145					150					155					160
Ala	Asn	Ser	Lys	Ala	Val	Thr	Leu	Glu	Ala	Ser	Phe	Thr	Pro	Asp	Ser
			165						170					175	
Gln	Phe	Ile	Met	Ile	Gly	Ser	Glu	Asp	Gly	Lys	Ile	His	Val	Trp	Asn
	180							185					190		

Gly Glu Ser Gly Ile Lys Val Ala Val Leu Asp Gly Lys His Thr Gly  
 195 200 205  
 Pro Ile Thr Cys Leu Gln Phe Asn Pro Lys Phe Met Thr Phe Ala Ser  
 210 215 220  
 Ala Cys Ser Asn Met Ala Phe Trp Leu Pro Thr Ile Asp Asp  
 225 230 235

<210> 3253

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3253

Met Gln Glu Ala Thr Leu Ser His Pro Arg Tyr Cys Pro His Thr Gln  
 1 5 10 15  
 Ala Ala Ala Leu Asn Ile Pro His Asn Lys Ala Lys Gly Ser Asp Lys  
 20 25 30  
 Ser Tyr Tyr Ser Gln Pro Ser His Leu Glu Thr Arg Gly Glu Thr Asn  
 35 40 45  
 Leu Pro Leu Asp Val Leu Arg Glu Arg Gln Asp Pro Gln Arg Asn Leu  
 50 55 60  
 Ser Glu Leu Ser Thr Cys Leu Ile Gln Gln Asp Arg Asp Gly Arg Arg  
 65 70 75 80  
 Leu Ala Phe Ser Phe Ala Trp Val Ser Thr Ile Leu Gln Gly Lys Leu  
 85 90 95  
 Cys Gly Gln Leu Gly Asn Thr Thr Ile Asn Trp Arg Gly Met Asn Asn  
 100 105 110  
 Arg Val Ser Gly Ala Val Cys  
 115

<210> 3254

<211> 881

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3254

Met Asn Tyr Pro Gly Arg Gly Ser Pro Arg Ser Pro Glu His Asn Gly  
 1 5 10 15  
 Arg Gly Gly Gly Gly Gly Ala Trp Glu Leu Gly Ser Asp Ala Arg Pro  
 20 25 30  
 Ala Phe Gly Gly Gly Val Cys Cys Phe Glu His Leu Pro Gly Gly Asp  
 35 40 45  
 Pro Asp Asp Gly Asp Val Pro Leu Ala Leu Leu Arg Gly Glu Pro Gly  
 50 55 60  
 Leu His Leu Ala Pro Gly Thr Asp Asp His Asn His His Leu Ala Leu  
 65 70 75 80  
 Asp Pro Cys Leu Ser Asp Glu Asn Tyr Asp Phe Ser Ser Ala Glu Ser  
 85 90 95  
 Gly Ser Ser Leu Arg Tyr Tyr Ser Glu Gly Glu Ser Gly Gly Gly Gly  
 100 105 110  
 Gly Gly Ser Ser Leu Ser Leu His Pro Pro Gln Gln Pro Pro Leu Val  
 115 120 125  
 Pro Thr Asn Ser Gly Gly Gly Gly Ala Thr Gly Gly Ser Pro Gly Glu  
 130 135 140  
 Arg Lys Arg Thr Arg Leu Gly Gly Pro Ala Ala Arg His Arg Tyr Glu  
 145 150 155 160  
 Val Val Thr Glu Leu Gly Pro Glu Glu Val Arg Trp Phe Tyr Lys Glu  
 165 170 175  
 Asp Lys Lys Thr Trp Lys Pro Phe Ile Gly Tyr Asp Ser Leu Arg Ile  
 180 185 190  
 Glu Leu Ala Phe Arg Thr Leu Leu Gln Thr Thr Gly Ala Arg Pro Gln  
 195 200 205  
 Gly Gly Asp Arg Asp Gly Asp His Val Cys Ser Pro Thr Gly Pro Ala  
 210 215 220  
 Ser Ser Ser Gly Glu Asp Asp Asp Glu Asp Arg Ala Cys Gly Phe Cys  
 225 230 235 240  
 Gln Ser Thr Thr Gly His Glu Pro Glu Met Val Glu Leu Val Asn Ile  
 245 250 255  
 Glu Pro Val Cys Val Arg Gly Gly Leu Tyr Glu Val Asp Val Thr Gln  
 260 265 270

Gly Glu Cys Tyr Pro Val Tyr Trp Asn Gln Ala Asp Lys Ile Pro Val			
275	280	285	
Met Arg Gly Gln Trp Phe Ile Asp Gly Thr Trp Gln Pro Leu Glu Glu			
290	295	300	
Glu Glu Ser Asn Leu Ile Glu Gln Glu His Leu Asn Cys Phe Arg Gly			
305	310	315	320
Gln Gln Met Gln Glu Asn Phe Asp Ile Glu Val Ser Lys Ser Ile Asp			
	325	330	335
Gly Lys Asp Gly Ser Gly Ile Asn Tyr Ser Ala Val His Ser Phe Lys			
	340	345	350
Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu			
	355	360	365
Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys			
	370	375	380
Leu Gly Phe Ser Lys Ala Ser Ser Ser Gly Thr Arg Leu His Arg Gly			
385	390	395	400
Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His			
	405	410	415
Ile Val Phe Val Val His Gly Ile Gly Gln Lys Met Asp Gln Gly Arg			
	420	425	430
Ile Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu			
	435	440	445
Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val			
	450	455	460
Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser Ile			
465	470	475	480
Thr Pro Asp Lys Val Arg Gly Leu Arg Asp Met Leu Asn Ser Ser Ala			
	485	490	495
Met Asp Ile Met Tyr Tyr Thr Ser Pro Leu Tyr Arg Asp Glu Leu Val			
	500	505	510
Lys Gly Leu Gln Gln Glu Leu Asn Arg Leu Tyr Ser Leu Phe Cys Ser			
	515	520	525
Arg Asn Pro Asp Phe Glu Glu Lys Gly Gly Lys Val Ser Ile Val Ser			
	530	535	540
His Ser Leu Gly Cys Val Ile Thr Tyr Asp Ile Met Thr Gly Trp Asn			
545	550	555	560

Pro Val Arg Leu Tyr Glu Gln Leu Leu Gln Lys Glu Glu Glu Leu Pro  
 565 570 575  
 Asp Glu Arg Trp Met Ser Tyr Glu Glu Arg His Leu Leu Asp Glu Leu  
 580 585 590  
 Tyr Ile Thr Lys Arg Arg Leu Lys Glu Ile Glu Glu Arg Leu His Gly  
 595 600 605  
 Leu Lys Ala Ser Ser Met Thr Gln Thr Pro Ala Leu Lys Phe Lys Val  
 610 615 620  
 Glu Asn Phe Phe Cys Met Gly Ser Pro Leu Ala Val Phe Leu Ala Leu  
 625 630 635 640  
 Arg Gly Ile Arg Pro Gly Asn Thr Gly Ser Gln Asp His Ile Leu Pro  
 645 650 655  
 Arg Glu Ile Cys Asn Arg Leu Leu Asn Ile Phe His Pro Thr Asp Pro  
 660 665 670  
 Val Ala Tyr Arg Leu Glu Pro Leu Ile Leu Lys His Tyr Ser Asn Ile  
 675 680 685  
 Ser Pro Val Gln Ile His Trp Tyr Asn Thr Ser Asn Pro Leu Pro Tyr  
 690 695 700  
 Glu His Met Lys Pro Ser Phe Leu Asn Pro Ala Lys Glu Pro Thr Ser  
 705 710 715 720  
 Val Ser Glu Asn Glu Gly Ile Ser Thr Ile Pro Ser Pro Val Thr Ser  
 725 730 735  
 Pro Val Leu Ser Arg Arg His Tyr Gly Glu Ser Ile Thr Asn Ile Gly  
 740 745 750  
 Lys Ala Ser Ile Leu Gly Ala Ala Ser Ile Gly Lys Gly Leu Gly Gly  
 755 760 765  
 Met Leu Phe Ser Arg Phe Gly Arg Ser Ser Thr Thr Gln Ser Ser Glu  
 770 775 780  
 Thr Ser Lys Asp Ser Met Glu Asp Glu Lys Lys Pro Val Ala Ser Pro  
 785 790 795 800  
 Ser Ala Thr Thr Val Gly Thr Gln Thr Leu Pro His Ser Ser Ser Gly  
 805 810 815  
 Phe Leu Asp Ser Ala Leu Glu Leu Asp His Arg Ile Asp Phe Glu Leu  
 820 825 830  
 Arg Glu Gly Leu Val Glu Ser Arg Tyr Trp Ser Ala Val Thr Ser His  
 835 840 845

Thr Ala Tyr Trp Ser Ser Leu Asp Val Ala Leu Phe Leu Leu Thr Phe  
 850 855 860  
 Met Tyr Lys His Glu His Asp Asp Asp Ala Lys Pro Asn Leu Asp Pro  
 865 870 875 880  
 Ile

<210> 3255

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3255

Met Cys Ala Trp Met Ile Asp Ser Phe Gly Asn Glu Glu Gln Arg His  
 1 5 10 15  
 Lys Phe Cys Pro Pro Leu Cys Thr Met Glu Lys Phe Ala Ser Tyr Cys  
 20 25 30  
 Leu Thr Glu Pro Gly Ser Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser  
 35 40 45  
 Ala Lys Lys Gln Gly Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe  
 50 55 60  
 Ile Ser Gly Ala Gly Glu Ser Asp Ile Tyr Val Val Met Cys Arg Thr  
 65 70 75 80  
 Gly Gly Pro Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly  
 85 90 95  
 Thr Pro Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Ser Gly Cys  
 100 105 110  
 Trp Thr Gly Asn Asn Ser Gly Tyr Glu Thr Leu Pro Pro Ala Ser Pro  
 115 120 125  
 Thr Pro Ala Leu Phe Gln Lys Thr Gly Leu His Thr Cys  
 130 135 140

<210> 3256

<211> 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3256

Met Ala Ala Val Ala Ala Thr Ala Ala Ala Lys Gly Asn Gly Gly Gly  
 1 5 10 15  
 Gly Gly Arg Ala Gly Ala Gly Asp Ala Ser Gly Thr Arg Lys Lys Lys  
 20 25 30  
 Gly Pro Gly Pro Leu Ala Thr Ala Tyr Leu Val Ile Tyr Asn Val Val  
 35 40 45  
 Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr  
 50 55 60  
 Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro  
 65 70 75 80  
 Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala  
 85 90 95  
 Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met  
 100 105 110  
 Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val  
 115 120 125  
 Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr  
 130 135 140  
 Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu  
 145 150 155 160  
 Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr  
 165 170 175  
 Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro  
 180 185 190  
 Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr  
 195 200 205  
 Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser  
 210 215 220  
 Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg  
 225 230 235 240  
 Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu



245

250

&lt;210&gt; 3257

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3257

Met Leu Trp Ser Val Pro Gly Asp Arg Ala Ala Pro Gly His Pro Pro  
 1 5 10 15  
 Phe Arg Ser Glu Ala Ser His Pro Thr Gln Gly Pro Ser Thr Thr Ser  
 20 25 30  
 Pro Phe Ser Pro Phe Leu Gly Ala Asp Pro Gly Gly Ser Ile Tyr Arg  
 35 40 45  
 Gly Val Pro Gly Ser Leu Thr Ala Gly Thr Thr Glu Ala Arg Lys Ser  
 50 55 60  
 Cys Leu Ala Pro Ala Gln Gly Thr Gln Gly Arg Leu Gly Ala Pro Ala  
 65 70 75 80  
 Gly Ser His Ser Pro Arg Arg Gln Gly Leu Val Tyr Pro Cys Ala Met  
 85 90 95  
 Ser Val Ile Gly Leu Cys Ala Gly Ser Val Met Arg Ser Leu Pro Gly  
 100 105 110  
 Leu Pro Arg Pro Arg Arg  
 115

&lt;210&gt; 3258

&lt;211&gt; 804

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3258

Met Arg Pro Val Ala Leu Leu Leu Leu Pro Ser Leu Leu Ala Leu Leu  
 1 5 10 15  
 Ala His Gly Leu Ser Leu Glu Ala Pro Thr Val Gly Lys Gly Gln Ala

20	25	30
Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala Pro Thr Pro		
35	40	45
Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu		
50	55	60
Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly		
65	70	75
Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro		
85	90	95
Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn		
100	105	110
Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala		
115	120	125
Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser		
130	135	140
Glu Ser Pro Met Leu Arg Ile Thr Ala Pro Leu Pro Pro Gly Pro Ser		
145	150	155
Met Ala Val Pro Thr Leu Gly Pro Gly Glu Ile Ala Ser Thr Thr Pro		
165	170	175
Pro Ser Arg Ala Trp Thr Pro Thr Gln Glu Gly Pro Gly Asp Met Gly		
180	185	190
Arg Pro Trp Val Ala Glu Val Val Ser Gln Gly Ala Gly Ile Gly Ile		
195	200	205
Gln Gly Thr Ile Thr Ser Ser Thr Ala Ser Gly Asp Asp Glu Glu Thr		
210	215	220
Thr Thr Thr Thr Thr Ile Ile Thr Thr Thr Ile Thr Thr Val Gln Thr		
225	230	235
Pro Gly Pro Cys Ser Trp Asn Phe Ser Gly Pro Glu Gly Ser Leu Asp		
245	250	255
Ser Pro Thr Asp Leu Ser Ser Pro Thr Asp Val Gly Leu Asp Cys Phe		
260	265	270
Phe Tyr Ile Ser Val Tyr Pro Gly Tyr Gly Val Glu Ile Lys Val Gln		
275	280	285
Asn Ile Ser Leu Arg Glu Gly Glu Thr Val Thr Val Glu Gly Leu Gly		
290	295	300
Gly Pro Asp Pro Leu Pro Leu Ala Asn Gln Ser Phe Leu Leu Arg Gly		

305	310	315	320
Gln Val Ile Arg Ser Pro Thr His Gln Ala Ala Leu Arg Phe Gln Ser			
	325	330	335
Leu Pro Pro Pro Ala Gly Pro Gly Thr Phe His Phe His Tyr Gln Ala			
	340	345	350
Tyr Leu Leu Ser Cys His Phe Pro Arg Arg Pro Ala Tyr Gly Asp Val			
	355	360	365
Thr Val Thr Ser Leu His Pro Gly Gly Ser Ala Arg Phe His Cys Ala			
	370	375	380
Thr Gly Tyr Gln Leu Lys Gly Ala Arg His Leu Thr Cys Leu Asn Ala			
385	390	395	400
Thr Gln Pro Phe Trp Asp Ser Lys Glu Pro Val Cys Ile Ala Ala Cys			
	405	410	415
Gly Gly Val Ile Arg Asn Ala Thr Thr Gly Arg Ile Val Ser Pro Gly			
	420	425	430
Phe Pro Gly Asn Tyr Ser Asn Asn Leu Thr Cys His Trp Leu Leu Glu			
	435	440	445
Ala Pro Glu Gly Gln Arg Leu His Leu His Phe Glu Lys Val Ser Leu			
	450	455	460
Ala Glu Asp Asp Asp Arg Leu Ile Ile Arg Asn Gly Asp Asn Val Glu			
465	470	475	480
Ala Pro Pro Val Tyr Asp Ser Tyr Glu Val Glu Tyr Leu Pro Ile Glu			
	485	490	495
Gly Leu Leu Ser Ser Gly Lys His Phe Phe Val Glu Leu Ser Thr Asp			
	500	505	510
Ser Ser Gly Ala Ala Ala Gly Met Ala Leu Arg Tyr Glu Ala Phe Gln			
	515	520	525
Gln Gly His Cys Tyr Glu Pro Phe Val Lys Tyr Gly Asn Phe Ser Ser			
	530	535	540
Ser Thr Pro Thr Tyr Pro Val Gly Thr Thr Val Glu Phe Ser Cys Asp			
545	550	555	560
Pro Gly Tyr Thr Leu Glu Gln Gly Ser Ile Ile Ile Glu Cys Val Asp			
	565	570	575
Pro His Asp Pro Gln Trp Asn Glu Thr Glu Pro Ala Cys Arg Ala Val			
	580	585	590
Cys Ser Gly Glu Ile Thr Asp Ser Ala Gly Val Val Leu Ser Pro Asn			

595	600	605
Trp Pro Glu Pro Tyr Gly Arg Gly Gln Asp Cys Ile Trp Gly Val His		
610	615	620
Val Glu Glu Asp Lys Arg Ile Met Leu Asp Ile Arg Val Leu Arg Ile		
625	630	635
Gly Pro Gly Asp Val Leu Thr Phe Tyr Asp Gly Asp Asp Leu Thr Ala		
645	650	655
Arg Val Leu Gly Gln Tyr Ser Gly Pro Arg Ser His Phe Lys Leu Phe		
660	665	670
Thr Ser Met Ala Asp Val Thr Ile Gln Phe Gln Ser Asp Pro Gly Thr		
675	680	685
Ser Val Leu Gly Tyr Gln Gln Gly Phe Val Ile His Phe Phe Glu Val		
690	695	700
Pro Arg Asn Asp Thr Cys Pro Glu Leu Pro Glu Ile Pro Asn Gly Trp		
705	710	715
Lys Ser Pro Ser Gln Pro Glu Leu Val His Gly Thr Val Val Thr Tyr		
725	730	735
Gln Cys Tyr Pro Gly Tyr Gln Val Val Gly Ser Ser Val Leu Met Cys		
740	745	750
Gln Trp Asp Leu Thr Trp Ser Glu Asp Leu Pro Ser Cys Gln Arg Val		
755	760	765
Thr Ser Cys His Asp Pro Gly Asp Val Glu His Ser Arg Arg Pro Tyr		
770	775	780
Pro Ala Pro Ser Phe Pro Trp Gly Pro Pro Cys Asn Ile Ser Val Thr		
785	790	795
Arg Val Leu Cys		800

&lt;210&gt; 3259

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3259

Met Ala Glu Ala Gln Ser Gly Thr Gly Gln Leu Gln Glu Gln Lys Lys

1                    5                    10                    15  
 Gly Leu Leu Ile Ala Val Ser Val Ser Val Asp Lys Ile Ile Ser His  
                   20                    25                    30  
 Phe Gly Ala Ala Arg Asn Leu Val Gln Lys Ala Gln Leu Gly Asp Ser  
                   35                    40                    45  
 Arg Leu Ser Pro Asp Val Gly His Leu Val Leu Thr Thr Leu Cys Pro  
                   50                    55                    60  
 Ala Leu His Ala Leu Val Ala Asp Gly Leu Lys Pro Phe Arg Lys Asp  
                   65                    70                    75                    80  
 Leu Ile Thr Gly Gln Arg Arg Ser Ser Pro Trp Ser Val Val Glu Ala  
                   85                    90                    95  
 Ser Val Lys Pro Gly Ser Ser Thr Arg Ser Leu Gly Thr Leu Tyr Ser  
                   100                    105                    110  
 Gln Val Ser Arg Leu Ala Pro Leu Ser Ser Ser Arg Ser Arg Phe His  
                   115                    120                    125  
 Ala Phe Ile Leu Gly Leu Leu Asn Thr Lys Gln Leu Glu Leu Trp Phe  
                   130                    135                    140  
 Ser Ser Leu Gln Glu Asp Ala Gly Ser Trp Trp Glu Gln Leu Thr Gln  
                   145                    150                    155                    160  
 Ala Ser Arg Val Tyr Ala Ser Gly Gly Thr Glu Gly Phe Pro Leu Ser  
                   165                    170                    175  
 Arg Trp Ala Pro Gly Arg His Gly Thr Ala Ala Glu Glu Gly Ala Gln  
                   180                    185                    190  
 Glu Arg Pro Leu Pro Thr Asp Glu Met Ala Pro Gly Arg Gly Leu Trp  
                   195                    200                    205  
 Leu Gly Arg Leu Phe Gly Val Pro Gly Gly Pro Ala Glu Asn Glu Asn  
                   210                    215                    220  
 Gly Ala Leu Lys Ser Arg Arg Pro Ser Ser Trp Leu Pro Pro Thr Val  
                   225                    230                    235                    240  
 Ser Val Leu Ala Leu Val Lys Arg Gly Ala Pro Pro Glu Met Pro Ser  
                   245                    250                    255  
 Pro Gln Glu Leu Glu Ala Ser Ala Pro Arg Met Val Gln Thr His Arg  
                   260                    265                    270  
 Ala Val Arg Ala Leu Cys Asp His Thr Ala Ala Arg Pro Asp Gln Leu  
                   275                    280                    285  
 Ser Phe Arg Arg Gly Glu Val Leu Arg Val Ile Thr Thr Val Asp Glu

290                      295                      300  
 Asp Trp Leu Arg Cys Gly Arg Asp Gly Met Glu Gly Leu Val Pro Val  
 305                      310                      315                      320  
 Gly Tyr Thr Ser Leu Val Leu  
                          325

<210> 3260

<211> 1076

<212> PRT

<213> Homo sapiens

<400> 3260

Met Gly Ile Leu Ser Ile Thr Asp Gln Pro Pro Leu Val Gln Ala Ile  
   1                      5                      10                      15  
 Phe Ser Arg Asp Val Glu Glu Val Arg Ser Leu Leu Ser Gln Lys Glu  
                          20                      25                      30  
 Asn Ile Asn Val Leu Asp Gln Glu Arg Arg Thr Pro Leu His Ala Ala  
                          35                      40                      45  
 Ala Tyr Val Gly Asp Val Pro Ile Leu Gln Leu Leu Leu Met Ser Gly  
                          50                      55                      60  
 Ala Asn Val Asn Ala Lys Asp Thr Leu Trp Leu Thr Pro Leu His Arg  
   65                      70                      75                      80  
 Ala Ala Ala Ser Arg Asn Glu Lys Val Leu Gly Leu Leu Leu Ala His  
                          85                      90                      95  
 Ser Ala Asp Val Asn Ala Arg Asp Lys Leu Trp Gln Thr Pro Leu His  
                          100                      105                      110  
 Val Ala Ala Ala Asn Arg Ala Thr Lys Cys Ala Glu Ala Leu Ala Pro  
                          115                      120                      125  
 Leu Leu Ser Ser Leu Asn Val Ala Asp Arg Ser Gly Arg Ser Ala Leu  
                          130                      135                      140  
 His His Ala Val His Ser Gly His Leu Glu Thr Val Asn Leu Leu Leu  
   145                      150                      155                      160  
 Asn Lys Gly Ala Ser Leu Asn Val Cys Asp Lys Lys Glu Arg Gln Pro  
                          165                      170                      175  
 Leu His Trp Ala Ala Phe Leu Gly His Leu Glu Val Leu Lys Leu Leu

180	185	190
Val Ala Arg Gly Ala Asp Leu Gly Cys Lys Asp Arg Lys Gly Tyr Gly		
195	200	205
Leu Leu His Thr Ala Ala Ala Ser Gly Gln Ile Glu Val Val Lys Tyr		
210	215	220
Leu Leu Arg Met Gly Ala Glu Ile Asp Glu Pro Asn Ala Phe Gly Asn		
225	230	235
Thr Ala Leu His Ile Ala Cys Tyr Leu Gly Gln Asp Ala Val Ala Ile		
245	250	255
Glu Leu Val Asn Ala Gly Ala Asn Val Asn Gln Pro Asn Asp Lys Gly		
260	265	270
Phe Thr Pro Leu His Val Ala Ala Val Ser Thr Asn Gly Ala Leu Cys		
275	280	285
Leu Glu Leu Leu Val Asn Asn Gly Ala Asp Val Asn Tyr Gln Ser Lys		
290	295	300
Glu Gly Lys Ser Pro Leu His Met Ala Ala Ile His Gly Arg Phe Thr		
305	310	315
Arg Ser Gln Ile Leu Ile Gln Asn Gly Ser Glu Ile Asp Cys Ala Asp		
325	330	335
Lys Phe Gly Asn Thr Pro Leu His Val Ala Ala Arg Tyr Gly His Glu		
340	345	350
Leu Leu Ile Ser Thr Leu Met Thr Asn Gly Ala Asp Thr Ala Arg Arg		
355	360	365
Gly Ile His Asp Met Phe Pro Leu His Leu Ala Val Leu Phe Gly Phe		
370	375	380
Ser Asp Cys Cys Arg Lys Leu Leu Ser Ser Gly Gln Leu Tyr Ser Ile		
385	390	395
Val Ser Ser Leu Ser Asn Glu His Val Leu Ser Ala Gly Phe Asp Ile		
405	410	415
Asn Thr Pro Asp Asn Leu Gly Arg Thr Cys Leu His Ala Ala Ala Ser		
420	425	430
Gly Gly Asn Val Glu Cys Leu Asn Leu Leu Leu Ser Ser Gly Ala Asp		
435	440	445
Leu Arg Arg Arg Asp Lys Phe Gly Arg Thr Pro Leu His Tyr Ala Ala		
450	455	460
Ala Asn Gly Ser Tyr Gln Cys Ala Val Thr Leu Val Thr Ala Gly Ala		

465                      470                      475                      480  
 Gly Val Asn Glu Ala Asp Cys Lys Gly Cys Ser Pro Leu His Tyr Ala  
                                  485                      490                      495  
 Ala Ala Ser Asp Thr Tyr Arg Arg Ala Glu Pro His Thr Pro Ser Ser  
                                  500                      505                      510  
 His Asp Ala Glu Glu Asp Glu Pro Leu Lys Glu Ser Arg Arg Lys Glu  
                                  515                      520                      525  
 Ala Phe Phe Cys Leu Glu Phe Leu Leu Asp Asn Gly Ala Asp Pro Ser  
                                  530                      535                      540  
 Leu Arg Asp Arg Gln Gly Tyr Thr Ala Val His Tyr Ala Ala Ala Tyr  
 545                      550                      555                      560  
 Gly Asn Arg Gln Asn Leu Glu Leu Leu Leu Glu Met Ser Phe Asn Cys  
                                  565                      570                      575  
 Leu Glu Asp Val Glu Ser Thr Ile Pro Val Ser Pro Leu His Leu Ala  
                                  580                      585                      590  
 Ala Tyr Asn Gly His Cys Glu Ala Leu Lys Thr Leu Ala Glu Thr Leu  
                                  595                      600                      605  
 Val Asn Leu Asp Val Arg Asp His Lys Gly Arg Thr Ala Leu Phe Leu  
                                  610                      615                      620  
 Ala Thr Glu Arg Gly Ser Thr Glu Cys Val Glu Val Leu Thr Ala His  
 625                      630                      635                      640  
 Gly Ala Ser Ala Leu Ile Lys Glu Arg Lys Arg Lys Trp Thr Pro Leu  
                                  645                      650                      655  
 His Ala Ala Ala Ala Ser Gly His Thr Asp Ser Leu His Leu Leu Ile  
                                  660                      665                      670  
 Asp Ser Gly Glu Arg Ala Asp Ile Thr Asp Val Met Asp Ala Tyr Gly  
                                  675                      680                      685  
 Gln Thr Pro Leu Met Leu Ala Ile Met Asn Gly His Val Asp Cys Val  
                                  690                      695                      700  
 His Leu Leu Leu Glu Lys Gly Ser Thr Ala Asp Ala Ala Asp Leu Arg  
 705                      710                      715                      720  
 Gly Arg Thr Ala Leu His Arg Gly Ala Val Thr Gly Cys Glu Asp Cys  
                                  725                      730                      735  
 Leu Ala Ala Leu Leu Asp His Asp Ala Phe Val Leu Cys Arg Asp Phe  
                                  740                      745                      750  
 Lys Gly Arg Thr Pro Ile His Leu Ala Ser Ala Cys Gly His Thr Ala



755	760	765
Val Leu Arg Thr Leu Leu Gln Ala Ala Leu Ser Thr Asp Pro Leu Asp		
770	775	780
Ala Gly Val Asp Tyr Ser Gly Tyr Ser Pro Met His Trp Ala Ser Tyr		
785	790	795
Thr Gly Arg Glu Asp Cys Leu Glu Leu Leu Leu Glu His Ser Pro Phe		
805	810	815
Ser Tyr Leu Glu Gly Asn Pro Phe Thr Pro Leu His Cys Ala Val Ile		
820	825	830
Asn Asn Gln Asp Ser Thr Thr Glu Met Leu Leu Gly Ala Leu Gly Ala		
835	840	845
Lys Ile Val Asn Ser Arg Asp Ala Lys Gly Arg Thr Pro Leu His Ala		
850	855	860
Ala Ala Phe Ala Asp Asn Val Ser Gly Leu Arg Met Leu Leu Gln His		
865	870	875
Gln Ala Glu Val Asn Ala Thr Asp His Thr Gly Arg Thr Ala Leu Met		
885	890	895
Thr Ala Ala Glu Asn Gly Gln Thr Ala Ala Val Glu Phe Leu Leu Tyr		
900	905	910
Arg Gly Lys Ala Asp Leu Thr Val Leu Asp Glu Asn Lys Asn Thr Ala		
915	920	925
Leu His Leu Ala Cys Ser Lys Gly His Glu Lys Cys Ala Leu Met Ile		
930	935	940
Leu Ala Glu Thr Gln Asp Leu Gly Leu Ile Asn Ala Thr Asn Ser Ala		
945	950	955
Leu Gln Met Pro Leu His Ile Ala Ala Arg Asn Gly Leu Ala Ser Val		
965	970	975
Val Gln Ala Leu Leu Ser His Gly Ala Thr Val Leu Ala Val Asp Glu		
980	985	990
Glu Gly His Thr Pro Ala Leu Ala Cys Ala Pro Asn Lys Asp Val Ala		
995	1000	1005
Asp Cys Leu Ala Leu Ile Leu Ser Thr Met Lys Pro Phe Pro Pro Lys		
1010	1015	1020
Asp Ala Val Ser Pro Phe Ser Phe Ser Leu Leu Lys Asn Cys Ser Ile		
1025	1030	1035
		1040

Ala Ala Ala Lys Thr Val Gly Gly Cys Gly Ala Leu Pro His Gly Ala  
                   1045                  1050                  1055  
 Ser Cys Pro Tyr Ser Gln Glu Arg Pro Gly Ala Ile Gly Leu Asp Gly  
                   1060                  1065                  1070  
 Cys Tyr Ser Glu  
                   1075

<210> 3261

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3261

Met His Ser Pro Arg Thr Gln Ile Ile Trp Phe Cys Phe Thr Lys Ser  
   1                  5                  10                  15  
 Lys Cys Ser Thr Cys Ile Ser Leu Phe Gln Thr Glu Met Ala Ile Lys  
                   20                  25                  30  
 His Val Phe Gln Lys Val Phe Ala Gly Glu Lys Met Arg Lys Val Lys  
                   35                  40                  45  
 Glu Ser Phe Pro Asp Pro Asp Leu Arg Arg Lys Gly Glu Asp Thr Phe  
                   50                  55                  60  
 Cys Phe Val Ala Tyr Leu Leu Trp Ala Lys Ser Tyr Tyr Cys Leu Arg  
   65                  70                  75                  80  
 Glu Val Arg Leu Thr Leu Ala His Pro Trp Gly Ile Ser Cys Ala Cys  
                   85                  90                  95  
 Gly Gly Glu Thr Asn Gln Val Gly Asn Asn Ser Phe Ser Pro Tyr Leu  
                   100                  105                  110  
 Ser Ser Phe His Val Leu Leu Trp Asn Lys Ser Asp  
                   115                  120

<210> 3262

<211> 116

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3262

Met Val Leu Leu Leu Phe Cys Cys Cys Leu Arg Arg Ser Phe Val Leu  
 1 5 10 15  
 Val Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser  
 20 25 30  
 Pro Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu  
 35 40 45  
 Pro Ser Ser Trp Asp Tyr Arg His Val Pro Pro Pro His Pro Ala Asn  
 50 55 60  
 Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Asp Gln Ala Gly  
 65 70 75 80  
 Leu Glu Pro Pro Thr Ser Gly Val Pro Pro Thr Ser Ala Phe Gln Ser  
 85 90 95  
 Ala Gly Ile Thr Gly Met Ser His Pro Ala Asn Glu Trp Phe Leu Lys  
 100 105 110  
 Gln Lys Ser Gln  
 115

&lt;210&gt; 3263

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3263

Met Gly Met Leu Ser Leu Gly Glu Pro Glu Lys Ala Ser Leu Arg Arg  
 1 5 10 15  
 Gln Pro Glu Gly Gly Glu Asp Asn Val Lys Lys Glu Pro Val Thr Ala  
 20 25 30  
 Gln Cys Pro Gly Gly Val Gly Val Ser Arg Lys His Ser Arg Gln Arg  
 35 40 45  
 Glu Glu Lys Tyr Arg Gly Arg Thr Ala Val Glu His Leu Gln Glu Ile  
 50 55 60  
 Leu Cys Gly Trp Thr Thr Ala Gln Gly Lys Arg Gly Thr Ser Gly Gly  
 65 70 75 80

Arg His Glu Val Gly Lys Glu Met Ala Arg Arg Ser Gln Gly Phe Val  
                     85                    90                    95  
 Gly Tyr Ser Gly Val Asn Gly Arg Arg Gln Ala Thr Phe Ser Leu Leu  
                     100                    105                    110  
 Ile Ser Phe  
                     115

<210> 3264

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3264

Met Ala Pro Ser Ser Glu Ser Ser Val Pro Ser His Ser Met Ser Ser  
   1                    5                    10                    15  
 Arg Arg Asp Thr Asp Ser Asp Thr Gln Asp Ala Asn Asp Ser Ser Cys  
                     20                    25                    30  
 Lys Ser Ser Glu Arg Ser Leu Pro Asp Cys Thr Leu His Pro Asn Ser  
                     35                    40                    45  
 Ile Ser Ile Asp Ala Gly Pro Arg Gln Ala Pro Lys Ile Ala Gln Ile  
                     50                    55                    60  
 Lys Arg Asn Leu Ser Tyr Gly Asp Asn Ser Asp Pro Ala Leu Glu Ala  
   65                    70                    75                    80  
 Ser Ser Leu Pro Pro Pro Asp Pro Trp Leu Glu Thr Ser Ser Ser Ser  
                     85                    90                    95  
 Pro Ala Glu Pro Ala Gln Pro Gly Ala Cys Arg Arg Asp Gly Tyr Trp  
                     100                    105                    110  
 Phe Leu Lys Leu Leu Gln Ala Glu Thr Glu Arg Leu Glu Gly Trp Cys  
                     115                    120                    125  
 Cys Gln Met Asp Lys Glu Thr Lys Glu Asn Asn Leu Ser Glu Glu Val  
                     130                    135                    140  
 Leu Gly Lys Val Leu Ser Ala Val Gly Ser Ala Gln Leu Leu Met Ser  
   145                    150                    155                    160  
 Gln Lys Phe Gln Gln Phe Arg Gly Leu Cys Glu Gln Asn Leu Asn Pro  
                     165                    170                    175

Asp Ala Asn Pro Arg Pro Thr Ala Gln Asp Leu Ala Gly Phe Trp Asp  
                   180                  185                  190  
 Leu Leu Gln Leu Ser Ile Glu Asp Ile Ser Met Lys Phe Asp Glu Leu  
                   195                  200                  205  
 Tyr His Leu Lys Ala Asn Ser Trp Gln Leu Val Glu Thr Pro Glu Lys  
                   210                  215                  220  
 Arg Lys Val Ser Met Glu Gln Cys Gly Gly Glu Val Gln Gly Gln Ile  
 225                  230                  235                  240  
 Pro Gly Arg Gln

<210> 3265

<211> 817

<212> PRT

<213> Homo sapiens

<400> 3265

Met Thr Ser Ala Ala His Ser Glu Asn Tyr Ser Pro Ala Ser Met Val  
           1                  5                  10                  15  
 Thr Glu Val Leu Trp Ile Leu Ser Asp Gln Lys Glu Cys Ala Val Glu  
                   20                  25                  30  
 Cys Leu Tyr Asn Asn Ile Val Ile Glu Thr Leu Leu Gln Pro Ile His  
                   35                  40                  45  
 Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys Ser Glu Thr Ala  
                   50                  55                  60  
 Leu Ile His Ile Ala Gly Ile Leu Val Arg Ile Ala Ser Val Glu Glu  
                   65                  70                  75                  80  
 Gly Leu Ile Leu Leu Leu Tyr Gly Ala Asn Met Asn Ser Ser Glu Glu  
                   85                  90                  95  
 Ser Pro Thr Gly Ala His Ile Ile Ala Gln Phe Ser Lys Lys Leu Leu  
                   100                  105                  110  
 Asp Glu Asp Ile Ser Ile Phe Ser Gly Ser Glu Met Leu Pro Val Val  
                   115                  120                  125  
 Lys Gly Ala Phe Ile Ser Val Cys Arg His Ile Tyr Ser Thr Cys Glu  
                   130                  135                  140

Gly Leu Gln Val Leu Ile Thr Tyr Asn Leu His Glu Ser Ile Ala Lys  
 145 150 155 160  
 Ala Trp Lys Lys Thr Ser Leu Leu Ser Glu Arg Ile Pro Thr Pro Val  
 165 170 175  
 Glu Gly Ser Asp Ser Val Ser Ser Val Ser Gln Glu Ser Gln Asn Ile  
 180 185 190  
 Met Ala Trp Glu Asp Asn Leu Leu Asp Asp Leu Leu His Phe Ala Ala  
 195 200 205  
 Thr Pro Lys Gly Leu Leu Leu Leu Gln Arg Thr Gly Ala Ile Asn Glu  
 210 215 220  
 Cys Val Thr Phe Ile Phe Asn Arg Tyr Ala Lys Lys Leu Gln Val Ser  
 225 230 235 240  
 Arg His Lys Lys Phe Gly Tyr Gly Val Leu Val Thr Arg Val Ala Ser  
 245 250 255  
 Thr Ala Ala Gly Gly Ile Ala Leu Lys Lys Ser Gly Phe Ile Asn Glu  
 260 265 270  
 Leu Ile Thr Glu Leu Trp Ser Asn Leu Glu Tyr Gly Arg Asp Asp Val  
 275 280 285  
 Arg Val Thr His Pro Arg Thr Thr Pro Val Asp Pro Ile Asp Arg Ser  
 290 295 300  
 Cys Gln Lys Ser Phe Leu Ala Leu Val Asn Leu Leu Ser Tyr Pro Ala  
 305 310 315 320  
 Ile Tyr Glu Leu Val Arg Asn Gln Asp Leu Pro Asn Lys Thr Glu Tyr  
 325 330 335  
 Ser Leu Arg Glu Val Pro Thr Cys Val Ile Asp Ile Ile Asp Arg Leu  
 340 345 350  
 Ile Ile Leu Asn Ser Glu Ala Lys Ile Arg Ser Leu Phe Asn Tyr Glu  
 355 360 365  
 Gln Ser His Ile Phe Gly Leu Arg Leu Leu Ser Val Ile Cys Cys Asp  
 370 375 380  
 Leu Asp Thr Leu Leu Leu Leu Glu Ala Gln Tyr Gln Val Ser Glu Met  
 385 390 395 400  
 Leu Leu Asn Ala Gln Glu Glu Asn Ile Leu Glu Ile Ser Glu Ser His  
 405 410 415  
 Arg Asp Phe Ile Ile Asp Gly Leu Ser Val Glu Arg Asn His Val Leu  
 420 425 430

Val Arg Ile Asn Leu Val Gly Gly Pro Leu Glu Arg Ile Leu Pro Pro  
 435 440 445  
 Arg Leu Leu Glu Lys Ser Asp Asn Pro Tyr Pro Trp Pro Met Phe Ser  
 450 455 460  
 Ser Tyr Pro Leu Pro Asn Cys Tyr Leu Ser Asp Ile Thr Arg Asn Ala  
 465 470 475 480  
 Gly Ile Lys Gln Asp Asn Asp Leu Asp Lys Leu Leu Leu Cys Leu Lys  
 485 490 495  
 Ile Ser Asp Lys Gln Thr Glu Trp Ile Glu Asn Cys Gln Arg Gln Phe  
 500 505 510  
 Cys Lys Met Met Lys Ala Lys Pro Asp Ile Ile Ser Gly Glu Ala Leu  
 515 520 525  
 Ile Glu Leu Leu Glu Lys Phe Val Leu His Leu Thr Glu Ser Pro Ser  
 530 535 540  
 Glu Cys Tyr Phe Pro Ser Val Glu Tyr Thr Ala Thr Asp Ala Asn Val  
 545 550 555 560  
 Lys Asn Glu Ser Leu Ser Ser Val Gln Gln Leu Gly Ile Lys Met Thr  
 565 570 575  
 Val Arg Tyr Gly Lys Phe Leu Ser Leu Leu Lys Asp Gly Ala Glu Asn  
 580 585 590  
 Asp Leu Thr Trp Val Leu Lys His Cys Glu Arg Phe Leu Lys Gln Gln  
 595 600 605  
 Gln Thr Ser Ile Lys Ser Ser Leu Leu Cys Leu Gln Gly Asn Tyr Ala  
 610 615 620  
 Gly His Asp Trp Phe Val Ser Ser Leu Phe Met Ile Met Leu Gly Asp  
 625 630 635 640  
 Lys Glu Lys Thr Phe Gln Phe Leu His Gln Phe Ser Arg Leu Leu Thr  
 645 650 655  
 Ser Ala Phe Leu Trp Leu Pro Arg Leu His Ile Ser Ser Tyr Leu Pro  
 660 665 670  
 Asn Asp Thr Val Glu Ser Gly Ile His Pro Val Tyr Phe Cys Ser Thr  
 675 680 685  
 His Tyr Ile Glu Met Leu Leu Lys Ala Glu Leu Pro Leu Val Phe Ser  
 690 695 700  
 Ala Phe His Met Ser Gly Phe Ala Pro Ser Gln Ile Cys Leu Gln Trp  
 705 710 715 720

Ile Thr Gln Cys Phe Trp Asn Tyr Leu Asp Trp Ile Glu Ile Cys His  
                     725                    730                    735  
 Tyr Ile Ala Thr Cys Val Phe Leu Gly Pro Asp Tyr Gln Val Tyr Ile  
                     740                    745                    750  
 Cys Ile Ala Val Phe Lys His Leu Gln Gln Asp Ile Leu Gln His Thr  
                     755                    760                    765  
 Gln Ala Gln Asp Leu Gln Val Phe Leu Lys Glu Glu Ala Leu His Gly  
                     770                    775                    780  
 Phe Arg Val Ser Asp Tyr Phe Glu Tyr Met Glu Ile Leu Glu Gln Asn  
 785                    790                    795                    800  
 Tyr Arg Thr Val Leu Leu Arg Asp Met Arg Asn Ile Arg Leu Gln Ser  
                     805                    810                    815  
 Thr

<210> 3266

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3266

Met Phe Ser His Leu Gln Ile Phe Val Phe Pro Gln Thr Lys Arg Lys  
   1                    5                    10                    15  
 Lys Thr Thr Leu Tyr Ser Leu Phe Tyr Ser Val Thr Leu Leu Cys Tyr  
                     20                    25                    30  
 Val Arg Asn Leu Lys Tyr Ile Gly Asp Val Gly Ile Leu Ser Leu Thr  
                     35                    40                    45  
 Ala His Cys Thr Gly Gln Glu Ser Thr Val Phe Gln Leu Glu Phe Arg  
                     50                    55                    60  
 Thr Pro Gly Phe Glu Val Glu Asp Asp His Cys Ser Thr Trp Phe Gly  
   65                    70                    75                    80  
 Ile Ala Thr Gly Val Ala Lys Pro Lys Glu Gly Tyr Ile Arg Lys Gly  
                     85                    90                    95  
 Gly Val Arg Arg Gln Asn Lys Glu Lys Glu Glu Trp Val Phe Tyr Leu  
                     100                    105                    110



Phe Ser Phe Ile Asn

115

<210> 3267

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3267

Met Phe Arg Phe His Thr Lys Lys Glu His Thr Phe Thr Ile Phe Ser  
 1 5 10 15  
 Gly Gly Cys Leu Leu Leu His Trp Gln Ala Gly Thr Glu Phe Phe Leu  
 20 25 30  
 His Asp Lys Ser Gly Gly Leu Leu Val Arg Glu Pro Met Gly Ile Phe  
 35 40 45  
 Ser Trp Lys Glu Tyr Ser Ser Ile Pro Ser Pro Asn Pro Thr Val Ile  
 50 55 60  
 Phe Ile Thr Leu Gly Gln Gly Cys Ile Glu Cys Val Cys Val Cys Val  
 65 70 75 80  
 Cys Val Cys Val Cys Val Cys Val Arg Val Gly Val Val Leu Gly His  
 85 90 95  
 Leu Trp Pro Val Thr Lys Val Thr Arg Thr Ile Cys Val Pro Ala Val  
 100 105 110  
 Ile Ala Cys Asp Cys Gly Cys Ile Ser Ser Leu Pro Arg Ser Leu Val  
 115 120 125  
 Thr Leu Ser Ala His Gln Gly Arg Glu Leu Ser Thr Asp Thr Cys Gln  
 130 135 140  
 Gly Pro Leu  
 145

<210> 3268

<211> 797

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3268

Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr  
 1 5 10 15  
 Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu  
 20 25 30  
 Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser  
 35 40 45  
 Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp  
 50 55 60  
 Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys  
 65 70 75 80  
 Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile  
 85 90 95  
 Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys  
 100 105 110  
 Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala  
 115 120 125  
 Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met  
 130 135 140  
 Lys Gln Cys Ile Lys Val Trp Thr Glu Asp Ser Ile Ala Lys Pro His  
 145 150 155 160  
 Val Ile Val Ala Gly Ala Ala Thr Trp Ser Ile Lys Ile His Asn Gly  
 165 170 175  
 Ser Ser Glu Ala Leu Ser Gln Tyr Lys Met Asn Ile Thr Ser Ile Ala  
 180 185 190  
 Pro Leu Leu Glu Lys Leu Ala Lys Thr Ser Asp Val Tyr Trp Val Leu  
 195 200 205  
 Gln Asp Pro Val Tyr Glu Asp Leu Leu Ser Glu Asn Arg Lys Met Ile  
 210 215 220  
 Thr Asn Glu Lys Ile Asp Ala Tyr Asn Glu Ala Ala Val Ser Ile Leu  
 225 230 235 240  
 Asn Ser Ser Thr Arg Asn Ser Lys Ser Asn Val Lys Met Phe Ser Val  
 245 250 255  
 Ser Lys Leu Ile Ala Gln Glu Thr Ile Met Glu Ser Leu Asp Gly Leu  
 260 265 270

His Leu Pro Glu Ser Ser Arg Glu Thr Thr Ala Met Ile Leu Met Asn  
 275 280 285  
 Val Tyr Cys Asn Lys Ile Leu Lys Pro Val Asp Gly Ser Cys Cys Gln  
 290 295 300  
 Pro Arg Pro Pro Val Thr Leu Ile Gln Lys Leu Ala Ala Cys Phe Phe  
 305 310 315 320  
 Thr Leu Ser Ile Ile Gly Tyr Leu Ile Phe Tyr Ile Ile His Arg Asn  
 325 330 335  
 Ala His Arg Lys Asn Lys Pro Cys Thr Asp Leu Glu Ser Gly Glu Glu  
 340 345 350  
 Lys Lys Asn Ile Ile Asn Thr Pro Val Ser Ser Leu Glu Ile Leu Leu  
 355 360 365  
 Gln Ser Phe Cys Lys Leu Gly Leu Ile Met Ala Tyr Phe Tyr Met Cys  
 370 375 380  
 Asp Arg Ala Asn Leu Phe Met Lys Glu Asn Lys Phe Tyr Thr His Ser  
 385 390 395 400  
 Ser Phe Phe Ile Pro Ile Ile Tyr Ile Leu Val Leu Gly Val Phe Tyr  
 405 410 415  
 Asn Glu Asn Thr Lys Glu Thr Lys Val Leu Asn Arg Glu Gln Thr Asp  
 420 425 430  
 Glu Trp Lys Gly Trp Met Gln Leu Val Ile Leu Ile Tyr His Ile Ser  
 435 440 445  
 Gly Ala Ser Thr Phe Leu Pro Val Tyr Met His Ile Arg Val Leu Val  
 450 455 460  
 Ala Ala Tyr Leu Phe Gln Thr Gly Tyr Gly His Phe Ser Tyr Phe Trp  
 465 470 475 480  
 Ile Lys Gly Asp Phe Gly Ile Tyr Arg Val Cys Gln Val Leu Phe Arg  
 485 490 495  
 Leu Asn Phe Leu Val Val Val Leu Cys Ile Val Met Asp Arg Pro Tyr  
 500 505 510  
 Gln Phe Tyr Tyr Phe Val Pro Leu Val Thr Val Trp Phe Met Val Ile  
 515 520 525  
 Tyr Val Thr Leu Ala Leu Trp Pro Gln Ile Ile Gln Lys Lys Ala Asn  
 530 535 540  
 Gly Asn Cys Phe Trp His Phe Gly Leu Leu Leu Lys Leu Gly Phe Leu  
 545 550 555 560

Leu Leu Phe Ile Cys Phe Leu Ala Tyr Ser Gln Gly Ala Phe Glu Lys  
 565 570 575  
 Ile Phe Ser Leu Trp Pro Leu Ser Lys Cys Phe Glu Leu Lys Gly Asn  
 580 585 590  
 Val Tyr Glu Trp Trp Phe Arg Trp Arg Leu Asp Arg Tyr Val Val Phe  
 595 600 605  
 His Gly Met Leu Phe Ala Phe Ile Tyr Leu Ala Leu Gln Lys Arg Gln  
 610 615 620  
 Ile Leu Ser Glu Gly Lys Gly Glu Pro Leu Phe Ser Asn Lys Ile Ser  
 625 630 635 640  
 Asn Phe Leu Leu Phe Ile Ser Val Val Ser Phe Leu Thr Tyr Ser Ile  
 645 650 655  
 Trp Ala Ser Ser Cys Lys Asn Lys Ala Glu Cys Asn Glu Leu His Pro  
 660 665 670  
 Ser Val Ser Val Val Gln Ile Leu Ala Phe Ile Leu Ile Arg Asn Ile  
 675 680 685  
 Pro Gly Tyr Ala Arg Ser Val Tyr Ser Ser Phe Phe Ala Trp Phe Gly  
 690 695 700  
 Lys Ile Ser Leu Glu Leu Phe Ile Cys Gln Tyr His Ile Trp Leu Ala  
 705 710 715 720  
 Ala Asp Thr Arg Gly Ile Leu Val Leu Ile Pro Gly Asn Pro Met Leu  
 725 730 735  
 Asn Ile Ile Val Ser Thr Phe Ile Phe Val Cys Val Ala His Glu Ile  
 740 745 750  
 Ser Gln Ile Thr Asn Asp Leu Ala Gln Ile Ile Ile Pro Lys Asp Asn  
 755 760 765  
 Ser Ser Leu Leu Lys Arg Leu Ala Cys Ile Ala Ala Phe Phe Cys Gly  
 770 775 780  
 Leu Leu Ile Leu Ser Ser Ile Gln Asp Lys Ser Lys His  
 785 790 795

<210> 3269

<211> 763

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3269

Met His Ser Ser Gln Asn Val Gln Thr Gln Glu Ser Ser Ser Pro Gln  
 1 5 10 15  
 Ser Gln Lys Phe Leu Pro Ala Val Gln Ser Ser Ser Phe Ala Ser Ser  
 20 25 30  
 Thr His Cys Gln Thr Leu Gln Asn Asn Ile Thr Ser Pro Asp Pro Lys  
 35 40 45  
 Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys  
 50 55 60  
 Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln  
 65 70 75 80  
 Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn  
 85 90 95  
 Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser  
 100 105 110  
 Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly  
 115 120 125  
 Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val  
 130 135 140  
 Thr Gln Leu Asn Gln Gln Ile Gly Gln Val Asn Asn Ala Ala Thr Leu  
 145 150 155 160  
 Asp Leu Lys Asn Ser Thr Asn Leu Ile Gln Thr Pro Gln Ile Arg Leu  
 165 170 175  
 Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu Ile Leu Lys Val His  
 180 185 190  
 Glu Ser Lys Val Gln Glu Gln His Asp Gln Ile Ile Asn Ala Ser Ser  
 195 200 205  
 Gln Ile Gln Ile Pro Asn His Ala Leu Gly His Gly His Gln Ala Ser  
 210 215 220  
 Leu Pro Asn Thr Gln Val Leu Leu Asp Ser Ala Cys Asp Leu Gln Ile  
 225 230 235 240  
 Leu Gln Gln Ser Ile Leu Gln Ala Gly Leu Gly Gln Val Lys Ala Ser  
 245 250 255  
 Leu Gln Ala Gln Arg Val Gln Ser Pro Gln Gln Ile Val His Pro Phe

260	265	270
Leu Gln Met Glu Gly His Val Ile Gln Ser Asn Gly Asp His Ser Gln		
275	280	285
Gln Gln Leu His Pro Gln Asn Ser Glu Val Met Lys Met Asp Leu Ser		
290	295	300
Glu Ser Ser Lys Pro Leu Gln Gln His Leu Thr Thr Lys Gly His Phe		
305	310	315
Ser Glu Thr Asn Gln His Asp Ser Lys Asn Gln Phe Val Ser Leu Gly		
325	330	335
Ser Met Cys Phe Pro Glu Ala Val Leu Leu Ser Asp Glu Arg Asn Ile		
340	345	350
Leu Ser Asn Val Asp Asp Ile Leu Ala Ala Thr Ala Ala Ala Cys Gly		
355	360	365
Val Thr Pro Thr Asp Phe Ser Lys Ser Thr Ser Asn Glu Thr Met Gln		
370	375	380
Ala Val Glu Asp Gly Asp Ser Lys Ser His Phe Gln Gln Ser Leu Asp		
385	390	395
Val Arg His Val Thr Ser Asp Phe Asn Ser Met Thr Ala Thr Val Gly		
405	410	415
Lys Pro Gln Asn Ile Asn Asp Thr Ser Leu Asn Gly Asn Gln Val Thr		
420	425	430
Val Asn Leu Ser Pro Val Pro Ala Leu Gln Ser Lys Met Thr Leu Asp		
435	440	445
Gln Gln His Ile Glu Thr Pro Gly Gln Asn Ile Pro Thr Lys Val Thr		
450	455	460
Ser Ala Val Val Gly Pro Ser His Glu Val Gln Glu Gln Ser Ser Gly		
465	470	475
Pro Phe Lys Lys Gln Ser Ala Thr Asn Leu Glu Ser Glu Glu Asp Ser		
485	490	495
Glu Ala Pro Val Asp Ser Thr Leu Asn Asn Asn Arg Asn Gln Glu Phe		
500	505	510
Val Ser Ser Ser Arg Ser Ile Ser Gly Glu Ser Ala Thr Ser Glu Ser		
515	520	525
Glu Phe Thr Leu Gly Gly Asp Asp Ser Gly Val Ser Met Asn Pro Ala		
530	535	540
Arg Ser Ala Leu Ala Leu Leu Ala Met Ala Gln Ser Gly Asp Ala Val		

545                      550                      555                      560  
 Ser Val Lys Ile Glu Glu Glu Asn Gln Asp Leu Met His Phe Asn Leu  
                                  565                      570                      575  
 Gln Lys Lys Gly Ala Lys Gly Lys Gly Gln Val Lys Glu Glu Asp Asn  
                                  580                      585                      590  
 Ser Asn Gln Lys Gln Leu Lys Arg Pro Ala Gln Gly Lys Arg Gln Asn  
                                  595                      600                      605  
 Pro Arg Gly Thr Asp Ile Tyr Leu Pro Tyr Thr Pro Pro Ser Ser Glu  
                                  610                      615                      620  
 Ser Cys His Asp Gly Tyr Gln His Gln Glu Lys Met Arg Gln Lys Ile  
 625                      630                      635                      640  
 Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys Thr Gly Phe Ile Ala  
                                  645                      650                      655  
 Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys Gln Gln Phe Ser Thr  
                                  660                      665                      670  
 Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met  
                                  675                      680                      685  
 Val Arg Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr  
                                  690                      695                      700  
 Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys  
 705                      710                      715                      720  
 Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser  
                                  725                      730                      735  
 Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Pro  
                                  740                      745                      750  
 Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Glu  
                                  755                      760

<210> 3270

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3270

Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Val Ala Asn Lys His

1                    5                    10                    15  
 Ile Lys Lys Ser Ser Thr Leu Leu Ile Ile Arg Glu Met Gln Arg Arg  
                   20                    25                    30  
 Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met Val Ile Ile Lys  
                   35                    40                    45  
 Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Val Gly Thr  
                   50                    55                    60  
 Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp Lys  
 65                    70                    75                    80  
 Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu Ile Leu Phe Val  
                   85                    90                    95  
 Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Glu Tyr Lys Pro Phe  
                   100                    105                    110  
 Tyr Tyr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala Ala Leu Phe Thr  
                   115                    120                    125  
 Ile Ala Lys Thr Gln  
 130

<210> 3271

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3271

Met Ala Ser Thr Ala Ala Asn Leu Leu Ala Asn Tyr Asn His Ser Cys  
 1                    5                    10                    15  
 Ser Ser Ser Ile Arg Leu Glu Lys Thr Arg Phe Pro Ser Gly Leu Gly  
                   20                    25                    30  
 Ala Phe Ser Ser Ser Arg Glu Thr His Gln Pro Ser Ala Cys Val Ala  
                   35                    40                    45  
 Cys Ala Pro Gly Ala Phe Leu Leu Ile Arg Ser Met Ile Ser Ala Trp  
                   50                    55                    60  
 Leu Gln Gly Pro Ala Lys Ser Val Arg Glu Pro Pro Asn Gly Ala Arg  
 65                    70                    75                    80  
 Ser Arg Arg Ile Ser Arg Ser Glu Thr Ser Leu Ser Pro His Leu Leu



	85	90	95
Thr Gly Asn Leu Gly Gly Phe Gln Leu Met Phe Phe Ser Pro			
	100	105	110

&lt;210&gt; 3272

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3272

Met Ala Thr Ile Lys Ser Glu Leu Ile Lys Asn Phe Ala Glu Glu Glu			
1	5	10	15
Ala Ile His His Asn Lys Ile Ser Ile Val Gly Thr Gly Ser Val Gly			
	20	25	30
Val Ala Cys Ala Ile Ser Ile Leu Leu Lys Gly Leu Ser Asp Glu Leu			
	35	40	45
Val Leu Val Asp Val Asp Glu Gly Lys Leu Lys Gly Glu Thr Met Asp			
	50	55	60
Leu Gln His Gly Ser Pro Phe Met Lys Met Pro Asn Ile Val Ser Ser			
	65	70	75
Lys Asp Tyr Leu Val Thr Ala Asn Ser Asn Leu Val Ile Ile Thr Ala			
	85	90	95
Gly Ala Arg Gln Lys Lys Gly Glu Thr Arg Leu Asp Leu Val Gln Arg			
	100	105	110
Asn Val Ser Ile Phe Lys Leu Met Ile Pro Asn Ile Thr Gln Tyr Ser			
	115	120	125
Pro His Cys Lys Leu Leu Ile Val Thr Asn Pro Val Asp Ile Leu Thr			
	130	135	140
Tyr Val Ala Trp Lys Leu Ser Gly Phe Pro Lys Asn Arg Val Ile Gly			
	145	150	155
Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Phe Ile Gly Gln			
	165	170	175
Arg Leu Gly Ile His Ser Glu Ser Cys His Gly Leu Ile Leu Gly Glu			
	180	185	190
His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Ile Ala Gly			

195	200	205
Val Pro Leu Lys Asp Leu Asn Pro Asp Ile Gly Thr Asp Lys Asp Pro		
210	215	220
Glu Gln Trp Glu Asn Val His Lys Lys Val Ile Ser Ser Gly Tyr Glu		
225	230	235
Met Val Lys Met Lys Gly Tyr Thr Ser Trp Gly Ile Ser Leu Ser Val		
245	250	255
Ala Asp Leu Thr Glu Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro		
260	265	270
Val Ser Thr Leu Ser Lys Gly Leu Tyr Gly Ile Asn Glu Asp Ile Phe		
275	280	285
Leu Ser Val Pro Cys Ile Leu Gly Glu Asn Gly Ile Thr Asp Leu Ile		
290	295	300
Lys Val Lys Leu Thr Leu Glu Glu Glu Ala Cys Leu Gln Lys Ser Ala		
305	310	315
Glu Thr Leu Trp Glu Ile Gln Lys Glu Leu Lys Leu		
325	330	

&lt;210&gt; 3273

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
1 5 10 15
Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Ala Ala Asp
20 25 30
Ser Lys Asp Glu Glu Val Lys Val Ala Pro Arg Arg Ser Phe Leu Asp
35 40 45
Phe Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val
50 55 60
Gln Cys Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu
65 70 75 80
Ser Ile Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val

	85		90		95
Leu Thr Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg					
	100		105		110
His Gln Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr					
	115		120		125
Ser Gly Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro					
	130		135		140
Leu Gln Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala					
145		150		155	160
Ile Leu Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala					
	165		170		175
Pro His Ala Val His Pro Thr Gly Thr Lys Ala Leu					
	180		185		

&lt;210&gt; 3274

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3274

Met Phe Phe Phe Val Glu Met Gly Phe Tyr His Val Gly Gln Ala Gly				
1	5	10	15	
Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser				
	20	25	30	
Ala Gly Ile Thr Gly Val Ser His Tyr Ala Arg Pro Ala Ala Ala Gly				
	35	40	45	
Phe Thr Asn Phe Leu Pro Thr Ala Gly Ala Thr Phe Tyr Ser Lys Glu				
	50	55	60	
Arg Asn Ser Asp His Cys Leu Cys Ser Leu Gly Phe Phe Pro Thr Leu				
65	70	75	80	
Ser Asn Gly Ile His Gln Phe His Ser Arg Met Ser Ser Leu Val Leu				
	85	90	95	
Gly Leu Glu Asn Trp Ala Trp Leu Met Asp				
	100	105		

&lt;210&gt; 3275

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3275

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Met Glu Leu Ala Ile Trp Tyr Val Gln Gln Pro Ser Leu Arg Ile Ala
  1             5             10             15
Lys Cys Ile Gly Asn Ile Phe Gln Ala Val Thr Pro Val Thr Ser Lys
          20             25             30
Gln Arg Ser Cys Leu Cys Leu Leu Ala Leu Ala Tyr Ala Lys Gly Val
      35             40             45
Phe Asn Asn Phe Gly Phe Gln Leu Phe Thr Leu Trp Phe Gln Leu Arg
      50             55             60
Leu Gly Arg Asn Trp Pro Gln Asp Lys Val Thr Pro Glu Phe Gly Thr
      65             70             75             80
Lys Pro Gly Ala Lys Asp Ser Asp Gln Thr Ser Trp Ala Ser Gly Ser
          85             90             95
Ala Pro Arg Gly Leu Lys Pro Thr Arg Val Arg Phe Gly Ile Cys Arg
          100             105             110
Val

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&lt;210&gt; 3276

&lt;211&gt; 197

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3276

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Met Ala Pro Ala Ser Val Pro Ser Ser Leu Gln Gly Gly Leu Gly Ala
  1             5             10             15
Cys Leu Gly Arg Lys Glu Arg Arg Cys Arg Ser Ala Trp Gly Gly Cys
          20             25             30
Ser Arg Arg Trp Pro Gln Ala Gln Ala Pro Gln Gly Leu Phe Pro Pro

```

35 40 45  
 Ala Arg Pro Gly Arg Ala Ala Trp Trp Arg Val Arg Glu Asp Pro Gly  
 50 55 60  
 Gly Gly Pro Ser Cys Lys Asn Trp Trp Gly Pro Arg Ser Pro Pro Ser  
 65 70 75 80  
 Arg Gly Gly Gly Leu Leu Pro Phe Gly Cys Cys Val Gln Ser Pro Val  
 85 90 95  
 Ser Cys Ser Leu Arg Leu Tyr Pro Ala Ala Phe Pro Pro Ala Gly Glu  
 100 105 110  
 Ala Arg Ala Ala Leu Cys Trp Pro Val Leu Pro Leu Pro Thr Arg Val  
 115 120 125  
 Pro Trp Trp Ser Cys Arg Gly Ala His Val Thr Ser Leu Pro Thr Gly  
 130 135 140  
 Val Arg Ala Gly Pro Gln Pro Glu Arg Glu Arg Pro Gln Ala Cys Ala  
 145 150 155 160  
 Gly Gly Gly Asn Gly Gln Leu Arg Val Val Val Pro Gly Ala Leu His  
 165 170 175  
 Ser Arg Gly Arg Gly Cys Val Arg Gly Val Arg Gly Ile Val Cys Pro  
 180 185 190  
 Ala Ala Gly Thr Gln  
 195

&lt;210&gt; 3277

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3277

Met Ala Thr Val Gly Glu Arg Arg Pro Leu Pro Ser Pro Glu Val Met  
 1 5 10 15  
 Leu Gly Gln Ser Trp Asn Leu Trp Val Glu Ala Ser Lys Leu Pro Gly  
 20 25 30  
 Lys Asp Gly Thr Glu Leu Asp Glu Ser Phe Lys Glu Phe Gly Lys Asn  
 35 40 45  
 Arg Glu Val Met Gly Leu Cys Arg Glu Asp Met Pro Ile Phe Gly Phe

50                      55                      60  
 Cys Pro Ala His Asp Asp Phe Tyr Leu Val Val Cys Asn Asp Cys Asn  
 65                      70                      75                      80  
 Gln Val Val Lys Pro Gln Ala Phe Gln Ser His Tyr Glu Arg Arg His  
 85                      90                      95  
 Ser Ser Ser Ser Lys Pro Pro Leu Ala Val Pro Pro Thr Ser Val Phe  
 100                      105                      110  
 Ser Phe Phe Pro Ser Leu Ser Lys Ser Lys Gly Gly Ser Ala Ser Gly  
 115                      120                      125  
 Ser Asn Arg Ser Ser Ser Gly Gly Val Leu Ser Ala Ser Ser Ser Ser  
 130                      135                      140  
 Ser Lys Leu Leu Lys His Pro Leu Thr Lys Asn Tyr Ser  
 145                      150                      155

<210> 3278

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3278

Met Asn Leu Pro Arg Ala Glu Arg Pro Arg Ser Thr Pro Gln Arg Ser  
 1                      5                      10                      15  
 Leu Arg Asp Ser Asp Gly Glu Asp Gly Lys Ile Asp Val Leu Gly Glu  
 20                      25                      30  
 Glu Glu Asp Glu Asp Glu Val Glu Asp Glu Glu Glu Glu Ala Ser Gln  
 35                      40                      45  
 Lys Phe Leu Glu Gln Ser Leu Gln Pro Gly Leu Gln Val Ala Arg Trp  
 50                      55                      60  
 Gly Gly Val Ala Leu Pro Arg Glu His Ile Glu Gly Gly Gly Pro Ser  
 65                      70                      75                      80  
 Asp Pro Ser Glu Phe Gly Thr Glu Phe Arg Ala Pro Pro Arg Ser Ala  
 85                      90                      95  
 Ala Ala Ser Glu Asp Ala Arg Gln Pro Ala Lys Pro Pro Tyr Ser Tyr  
 100                      105                      110  
 Ile Ala Leu Ile Thr Met Ala Ile Leu Gln Ser Pro His Lys Arg Leu

115	120	125
Thr Leu Ser Gly Ile Cys Ala Phe Ile Ser Gly Arg Phe Pro Tyr Tyr		
130	135	140
Arg Arg Lys Phe Pro Ala Trp Gln Asn Ser Ile Arg His Asn Leu Ser		
145	150	155
Leu Asn Asp Cys Phe Val Lys Ile Pro Arg Glu Pro Gly His Pro Gly		
165	170	175
Lys Gly Thr Tyr Trp Ser Leu Asp Pro Ala Ser Gln Asp Met Phe Asp		
180	185	190
Asn Gly Ser Phe Leu Arg Arg Arg Lys Arg Phe Lys Arg His Gln Leu		
195	200	205
Thr Pro Gly Ala His Leu Pro His Pro Phe Pro Leu Pro Ala Ala His		
210	215	220
Ala Ala Leu His Asn Pro Arg Pro Gly Pro Leu Leu Gly Ala Pro Ala		
225	230	235
Leu Pro Gln Pro Val Pro Gly Ala Tyr Pro Asn Thr Ala Pro Gly Arg		
245	250	255
Arg Pro Tyr Ala Leu Leu His Pro His Pro Pro Arg Tyr Leu Leu Leu		
260	265	270
Ser Ala Pro Ala Tyr Ala Gly Ala Pro Lys Lys Ala Glu Gly Ala Asp		
275	280	285
Leu Ala Thr Pro Gly Thr Leu Pro Val Leu Gln Pro Ser Leu Gly Pro		
290	295	300
Gln Pro Trp Glu Glu Gly Lys Gly Leu Ala Ser Pro Pro Gly Gly Gly		
305	310	315
Cys Ile Ser Phe Ser Ile Glu Ser Ile Met Gln Gly Val Arg Gly Ala		
325	330	335
Gly Thr Gly Ala Ala Gln Ser Leu Ser Pro Thr Ala Trp Ser Tyr Cys		
340	345	350
Pro Leu Leu Gln Arg Pro Ser Ser Leu Ser Asp Asn Phe Ala Ala Thr		
355	360	365
Ala Ala Ala Ser Gly Gly Gly Leu Arg Gln Arg Leu Arg Ser His Gln		
370	375	380
Gly Arg Gly Ala Gly Arg Ala Pro Val Gly Arg Val Gly Ala Ala Ala		
385	390	395
Val Ser Gly Gly Gly Arg Gly Leu		400

405

&lt;210&gt; 3279

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3279

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Met Gly Asp Leu Leu Pro Arg Ala Trp Pro Gly Ala Gly Cys Thr Glu
  1             5             10             15
Thr Gln Thr Thr Ser Gln Gly Pro Gln Glu Leu Ala Val Pro Thr Ala
      20             25             30
Glu Cys Tyr Ser Cys Ser Phe Tyr Phe Cys Val Cys Pro Glu Ala Leu
      35             40             45
Pro Gln Glu Glu Gln Glu Gly Ser Gly Ser Glu Glu Arg Gly Glu Glu
      50             55             60
Lys Gly Thr Ser Ser Pro Asp Tyr Arg His Tyr Leu Arg Met Trp Ala
      65             70             75             80
Lys Glu Lys Glu Ala Gln Lys Glu Thr Ile Lys Asp Leu Pro Lys Met
      85             90             95
Asn Gln Glu Gln Phe Ile Glu Leu Cys Lys Thr Leu Tyr Asn Met Phe
      100            105            110
Ser Glu Asp Pro Met Glu Gln Asp Leu Tyr His Ala Ile Ala Thr Val
      115            120            125
Ala Ser Leu Leu Leu Arg Ile Gly Glu Val Gly Lys Lys Phe Ser Ala
      130            135            140
Arg Thr Gly Arg Lys Pro Arg Asp Cys Ala Thr Gly Glu Asp Glu Pro
      145            150            155            160
Pro Ala Pro Glu Leu His Gln Asp Ala Ala Arg Glu Leu Gln Pro Pro
      165            170            175
Ala Ala Gly Asp Pro Gln Ala Lys Ala Gly Gly Asp Thr His Leu Gly
      180            185            190
Thr Ala Pro Gln Glu Ser Gln Val Val Val Glu Gly Gly Ser Gly Glu
      195            200            205
Gly Gln Gly Ser Pro Ser Gln Leu Leu Ser Asp Asp Glu Thr Lys Asp

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210	215	220	
Asp Met Ser Met Ser Ser Tyr Ser Val Val Ser Thr Gly Ser Leu Gln			
225	230	235	240
Cys Glu Asp Leu Ala Asp Asp Thr Val Leu Val Gly Gly Glu Ala Cys			
	245	250	255
Ser Ser Thr Ala Arg Ile Gly Gly Thr Val Asp Thr Asp Trp Cys Ile			
	260	265	270
Ser Phe Glu Gln Ile Leu Ala Ser Ile Leu Thr Glu Ser Val Leu Val			
	275	280	285
Asn Phe Phe Glu Lys Arg Val Asp Ile Gly Leu Lys Ile Lys Asp Gln			
290	295	300	
Lys Lys Val Glu Arg Gln Phe Ser Thr Ala Ser Asp His Glu Gln Pro			
305	310	315	320
Gly Val Ser Gly			

&lt;210&gt; 3280

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3280

Met Phe His Arg Thr Pro Pro Arg Arg Ser Phe Pro Asn Pro Ser Trp			
1	5	10	15
Lys Gly Pro Gly Ser Lys Gly His Gln Ser Cys Leu Ser Asp Gln Leu			
	20	25	30
Ala Val Ser Ser Gly Cys Trp Pro Glu Thr Ala Leu Ala Leu Ser Lys			
	35	40	45
Val Thr Val His Cys Leu Ala Ile Ala Ser Leu Ser Gly Pro Ala Leu			
	50	55	60
Gly Leu Val Arg Leu Leu Gln His Pro Trp Leu Phe Pro Trp Gln Cys			
	65	70	75
Asp Tyr Pro Ala Leu Thr Gln Ser Lys Gly Val Pro Leu Ser Trp Val			

	85		90		95
Lys	Phe	Thr	Arg	Arg	Leu
				Leu	Lys
			Cys	Leu	Leu
			Arg	Gly	Asn
				Leu	Cys
	100		105		110
Leu	Ser	Leu	Ser	Leu	Ser
				Leu	Ser
				Leu	Ser
	115		120		125
Leu	Ser	Leu	Ser	Leu	Ser
			Gln	Cys	Ile
			Ser	Leu	Leu
				Ser	Phe
				Thr	Phe
	130		135		140
Pro	Phe	Phe	Leu	Ser	Lys
			Asn	Asn	Val
			Leu	Val	Glu
				Ala	Leu
				Val	Thr
145			150		155
					160
Leu	Ile	Asn	Gln	Asn	Leu
			Pro	Phe	Pro
			Val	Ser	Leu
				Phe	Leu
				Arg	Pro
			165		170
					175
Phe	His	Pro	His	Tyr	Leu
				Leu	Leu
				Leu	Pro
				Arg	Asn
				Met	Thr
				Asp	His
				Gln	
			180		185
					190
Asp	Ala	Ala	Arg	Arg	Glu
			Asp	Leu	Ser
			Gln	Lys	Pro
				Thr	Ser
				Lys	Met
			195		200
					205
Gly	Gly	Arg	Cys	Gly	Leu
			Arg	Ser	Ser
			Ala	Met	His
				Pro	Lys
				Pro	Leu
			210		215
					220
Thr	Phe	Pro	Leu	Trp	Lys
			Cys	Thr	Gly
225			230		

&lt;210&gt; 3281

&lt;211&gt; 176

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

Met	Ala	Ala	Val	Glu	Lys	Arg	Arg	Gln	Ala	Val	Pro	Pro	Pro	Ala	Gly
1				5				10						15	
Phe	Thr	Asp	Ser	Gly	Arg	Gln	Ser	Val	Ser	Arg	Ala	Ala	Gly	Ala	Ala
				20				25					30		
Glu	Ser	Glu	Glu	Asp	Phe	Leu	Arg	Gln	Val	Gly	Val	Thr	Glu	Met	Leu
				35				40					45		
Arg	Ala	Ala	Leu	Leu	Lys	Val	Leu	Glu	Ala	Arg	Pro	Glu	Glu	Pro	Ile
				50				55					60		

Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val  
65 70 75 80  
Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Leu Gln Gln Gln  
85 90 95  
Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Arg  
100 105 110  
Arg Cys Ala Val Gly Arg Leu Gly Arg Val Gly Gln Arg Trp Thr Ser  
115 120 125  
Thr Pro Ser Met Pro Arg Ala Ala Pro Tyr Pro Gln Arg Arg Arg Arg  
130 135 140  
Gly Pro Gly Leu Ala Gly Ser Cys Ser Ala Arg Cys Leu Leu Gly Trp  
145 150 155 160  
Asp Gly Ser Asp Lys Val Gly Trp Arg Val Arg Ala Ser Val Arg Arg  
165 170 175

<210> 3282

<211> 924

<212> PRT

<213> Homo sapiens

<400> 3282

Met Ile Ser Gln Thr Gln Ser Leu Gly Gly Pro Pro Leu Glu His Glu  
1 5 10 15  
Val Pro Gly His Pro Pro Gly Gly Asp Met Gly Gln Gln Met Asn Met  
20 25 30  
Met Ile Gln Arg Leu Gly Gln Asp Ser Leu Thr Pro Glu Gln Val Ala  
35 40 45  
Trp Arg Lys Leu Gln Glu Glu Tyr Tyr Glu Glu Lys Arg Arg Lys Glu  
50 55 60  
Glu Gln Ile Gly Leu His Gly Ser Arg Pro Leu Gln Asp Met Met Gly  
65 70 75 80  
Met Gly Gly Met Met Val Arg Gly Pro Pro Pro Pro Tyr His Ser Lys  
85 90 95  
Pro Gly Asp Gln Trp Pro Pro Gly Met Gly Ala Gln Leu Arg Gly Pro  
100 105 110

Met Asp Val Gln Asp Pro Met Gln Leu Arg Gly Gly Pro Pro Phe Pro  
 115 120 125  
 Gly Pro Arg Phe Pro Gly Asn Gln Ile Gln Arg Val Pro Gly Phe Gly  
 130 135 140  
 Gly Met Gln Ser Met Pro Met Glu Val Pro Met Asn Ala Met Gln Arg  
 145 150 155 160  
 Pro Val Arg Pro Gly Met Gly Trp Thr Glu Asp Leu Pro Pro Met Gly  
 165 170 175  
 Gly Pro Ser Asn Phe Ala Gln Asn Thr Met Pro Tyr Pro Gly Gly Gln  
 180 185 190  
 Gly Glu Ala Glu Arg Phe Met Thr Pro Arg Val Arg Glu Glu Leu Leu  
 195 200 205  
 Arg His Gln Leu Leu Glu Lys Arg Ser Met Gly Met Gln Arg Pro Leu  
 210 215 220  
 Gly Met Ala Gly Ser Gly Met Gly Gln Ser Met Glu Met Glu Arg Met  
 225 230 235 240  
 Met Gln Ala His Arg Gln Met Asp Pro Ala Met Phe Pro Gly Gln Met  
 245 250 255  
 Ala Gly Gly Glu Gly Leu Ala Gly Thr Pro Met Gly Met Glu Phe Gly  
 260 265 270  
 Gly Gly Arg Gly Leu Leu Ser Pro Pro Met Gly Gln Ser Gly Leu Arg  
 275 280 285  
 Glu Val Asp Pro Pro Met Gly Pro Gly Asn Leu Asn Met Asn Met Asn  
 290 295 300  
 Val Asn Met Asn Met Asn Met Asn Leu Asn Val Gln Met Thr Pro Gln  
 305 310 315 320  
 Gln Gln Met Leu Met Ser Gln Lys Met Arg Gly Pro Gly Asp Leu Met  
 325 330 335  
 Gly Pro Gln Gly Leu Ser Pro Glu Glu Met Ala Arg Val Arg Ala Gln  
 340 345 350  
 Asn Ser Ser Gly Val Met Gly Gly Pro Gln Lys Met Leu Met Pro Ser  
 355 360 365  
 Gln Phe Pro Asn Gln Gly Gln Gln Gly Phe Ser Gly Gly Gln Gly Pro  
 370 375 380  
 Tyr Gln Ala Met Ser Gln Asp Met Gly Asn Thr Gln Asp Met Phe Ser  
 385 390 395 400

Pro Asp Gln Ser Ser Met Pro Met Ser Asn Val Gly Thr Thr Arg Leu  
 405 410 415  
 Ser His Met Pro Leu Pro Pro Ala Ser Asn Pro Pro Gly Thr Val His  
 420 425 430  
 Ser Ala Pro Asn Arg Gly Leu Gly Arg Arg Pro Ser Asp Leu Thr Ile  
 435 440 445  
 Ser Ile Asn Gln Met Gly Ser Pro Gly Met Gly His Leu Lys Ser Pro  
 450 455 460  
 Thr Leu Ser Gln Val His Ser Pro Leu Val Thr Ser Pro Ser Ala Asn  
 465 470 475 480  
 Leu Lys Ser Pro Gln Thr Pro Ser Gln Met Val Pro Leu Pro Ser Ala  
 485 490 495  
 Asn Pro Pro Gly Pro Leu Lys Ser Pro Gln Val Leu Gly Ser Ser Leu  
 500 505 510  
 Ser Val Arg Ser Pro Thr Gly Ser Pro Ser Arg Leu Lys Ser Pro Ser  
 515 520 525  
 Met Ala Val Pro Ser Pro Gly Trp Val Ala Ser Pro Lys Thr Ala Met  
 530 535 540  
 Pro Ser Pro Gly Val Ser Gln Asn Lys Gln Pro Pro Leu Asn Met Asn  
 545 550 555 560  
 Ser Ser Thr Thr Leu Ser Asn Met Glu Gln Gly Thr Leu Pro Pro Ser  
 565 570 575  
 Gly Pro Arg Ser Ser Ser Ser Ala Pro Pro Ala Asn Pro Pro Ser Gly  
 580 585 590  
 Leu Met Asn Pro Ser Leu Pro Phe Thr Ser Ser Pro Asp Pro Thr Pro  
 595 600 605  
 Ser Gln Asn Pro Leu Ser Leu Met Met Thr Gln Met Ser Lys Tyr Ala  
 610 615 620  
 Met Pro Ser Ser Thr Pro Leu Tyr His Asn Ala Ile Lys Thr Ile Ala  
 625 630 635 640  
 Thr Ser Asp Asp Glu Leu Leu Pro Asp Arg Pro Leu Leu Pro Pro Pro  
 645 650 655  
 Pro Pro Pro Gln Gly Ser Gly Pro Gly Ile Ser Asn Ser Gln Pro Ser  
 660 665 670  
 Gln Met His Leu Asn Ser Ala Ala Ala Gln Ser Pro Met Gly Met Asn  
 675 680 685

Leu Pro Gly Gln Gln Pro Leu Ser His Glu Pro Pro Pro Ala Met Leu  
 690 695 700  
 Pro Ser Pro Thr Pro Leu Gly Ser Asn Ile Pro Leu His Pro Asn Ala  
 705 710 715 720  
 Gln Gly Thr Gly Gly Pro Pro Gln Asn Ser Met Met Met Ala Pro Gly  
 725 730 735  
 Gly Pro Asp Ser Leu Asn Ala Pro Cys Gly Pro Val Pro Ser Ser Ser  
 740 745 750  
 Gln Met Met Pro Phe Pro Pro Arg Leu Gln Gln Pro His Gly Ala Met  
 755 760 765  
 Ala Pro Thr Gly Gly Gly Gly Gly Gly Gly Pro Gly Leu Gln Gln His Tyr  
 770 775 780  
 Pro Ser Gly Met Ala Leu Pro Pro Glu Asp Leu Pro Asn Gln Pro Pro  
 785 790 795 800  
 Gly Pro Met Pro Pro Gln Gln His Leu Met Gly Lys Ala Met Ala Gly  
 805 810 815  
 Arg Met Gly Asp Ala Tyr Pro Pro Gly Val Leu Pro Gly Val Ala Ser  
 820 825 830  
 Val Leu Asn Asp Pro Glu Leu Ser Glu Val Ile Arg Pro Thr Pro Thr  
 835 840 845  
 Gly Ile Pro Glu Phe Asp Leu Ser Arg Ile Ile Pro Ser Trp Phe Leu  
 850 855 860  
 Arg Thr Arg Pro Phe Ser Phe Cys Leu Tyr Leu Leu Arg Ile Leu Ser  
 865 870 875 880  
 Leu Leu Met Trp Leu Thr Pro Leu Pro Pro Leu Pro Ala Gly Gly Trp  
 885 890 895  
 Pro Gly Gly Gln Val Pro Ala Gly Ala Val Asn Arg Ala Leu Arg Phe  
 900 905 910  
 Cys Ala Gly Leu Cys Val Cys Cys Ile Ser Val Phe  
 915 920

&lt;210&gt; 3283

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3283

Met Ser Ser Gly Leu Arg Ala Ala Asp Phe Pro Arg Trp Lys Arg His  
 1 5 10 15  
 Ile Ser Glu Gln Leu Arg Arg Arg Asp Arg Leu Gln Arg Gln Ala Phe  
 20 25 30  
 Glu Glu Ile Ile Leu Gln Tyr Asn Lys Leu Leu Glu Lys Ser Asp Leu  
 35 40 45  
 His Ser Val Leu Ala Gln Lys Leu Gln Ala Glu Lys His Asp Val Pro  
 50 55 60  
 Asn Arg His Glu Ile Arg Arg Arg Gln Ala Arg Leu Gln Lys Glu Leu  
 65 70 75 80  
 Ala Glu Ala Ala Lys Glu Pro Leu Pro Val Glu Gln Asp Asp Asp Ile  
 85 90 95  
 Glu Val Ile Val Asp Glu Thr Ser Asp His Thr Glu Glu Thr Ser Pro  
 100 105 110  
 Val Arg Ala Ile Ser Arg Ala Ala Thr Lys Arg Leu Ser Gln Pro Ala  
 115 120 125  
 Gly Gly Leu Leu Asp Ser Ile Thr Asn Ile Phe Gly Arg Arg Ser Val  
 130 135 140  
 Ser Ser Phe Pro Val Pro Gln Asp Asn Val Asp Thr His Pro Gly Ser  
 145 150 155 160  
 Gly Lys Glu Val Arg Val Pro Ala Thr Ala Leu Cys Val Phe Asp Ala  
 165 170 175  
 His Asp Gly Glu Val Asn Ala Val Gln Phe Ser Pro Gly Ile Thr Ser  
 180 185 190  
 Ile Glu Phe Asp Ser Ala Gly Ser Tyr Leu Leu Ala Ala Ser Asn Asp  
 195 200 205  
 Phe Ala Ser Arg Ile Trp Thr Val Asp Asp Tyr Arg Leu Arg His Thr  
 210 215 220  
 Leu Thr Gly His Ser Gly Lys Val Leu Ser Ala Lys Phe Leu Leu Asp  
 225 230 235 240  
 Asn Ala Arg Ile Val Ser Gly Ser His Asp Arg Thr Leu Lys Leu Trp  
 245 250 255  
 Asp Leu Arg Ser Lys Val Cys Ile Lys Thr Val Phe Ala Gly Ser Ser  
 260 265 270

Cys Asn Asp Ile Val Cys Thr Glu Gln Cys Val Met Ser Gly His Phe  
 275 280 285  
 Asp Lys Lys Ile Arg Phe Trp Asp Ile Arg Ser Glu Ser Ile Val Arg  
 290 295 300  
 Glu Met Glu Leu Leu Gly Lys Ile Thr Ala Leu Asp Leu Asn Pro Glu  
 305 310 315 320  
 Arg Thr Glu Leu Leu Ser Cys Ser Arg Asp Asp Leu Leu Lys Val Ile  
 325 330 335  
 Asp Leu Arg Thr Asn Ala Ile Lys Gln Thr Phe Ser Ala Pro Gly Phe  
 340 345 350  
 Lys Cys Gly Ser Asp Trp Thr Arg Val Val Phe Ser Pro Asp Gly Ser  
 355 360 365  
 Tyr Val Ala Ala Gly Ser Ala Glu Gly Ser Leu Tyr Ile Trp Ser Val  
 370 375 380  
 Leu Thr Gly Lys Val Glu Lys Val Leu Ser Lys Gln His Ser Ser Ser  
 385 390 395 400  
 Ile Asn Ala Val Ala Trp Ser Pro Ser Gly Ser His Val Val Ser Val  
 405 410 415  
 Asp Lys Gly Cys Lys Ala Val Leu Trp Ala Gln Tyr  
 420 425

<210> 3284

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3284

Met Arg Met Val Pro Met Glu Met Phe Asn Tyr Cys Ser Gln Leu Glu  
 1 5 10 15  
 Asp Glu Asn Ser Ser Ala Gly Leu Asp Ile Pro Gly Pro Pro Cys Thr  
 20 25 30  
 Lys Ala Ser Pro Glu Pro Ala Lys Pro Lys Pro Gly Ala Gln His Ser  
 35 40 45  
 Leu Pro Thr Glu Ala Glu Ala Pro Ala Gly Glu Arg Glu Ala Ser His  
 50 55 60



Gly His Gly Asp His Cys Arg Gly Arg Val Arg Arg Arg Leu His His  
 65 70 75 80  
 Asp Gly Gly Gly Arg Cys Leu Trp Leu His Leu Arg Leu Pro His Gly  
 85 90 95  
 Gln Val Pro Pro Gly Ala Gln Lys Ala Pro Ala Pro Asp Gly Gly Pro  
 100 105 110  
 Arg Gly Arg Ala Arg Gly Pro Glu Ala Asp Leu Phe Cys Gly Leu Ser  
 115 120 125  
 Ala His Pro His Pro Ala Arg  
 130 135

<210> 3285

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3285

Met Glu His Phe Gly Ser Gly Leu Met Gly Glu Ser Pro Phe Ile Phe  
 1 5 10 15  
 Leu His Leu Gly Gln Leu His Ser Lys Glu Arg Asn Lys Gly His Val  
 20 25 30  
 Leu Pro Lys Ala Ser Gly Leu Thr Gly Gln Ser Gln Pro Phe Arg Glu  
 35 40 45  
 Gly Met Ser Pro Lys Glu Gly Ser Pro Phe Phe Pro Glu His Pro Pro  
 50 55 60  
 Leu Ser Ala Glu Leu Leu Leu Pro Thr His Pro Ser Thr Ile Ala Leu  
 65 70 75 80  
 Ser Thr Val Cys Pro Cys Gln Asn Pro Ser Pro Thr Cys Leu Ala Trp  
 85 90 95  
 Tyr Pro Ser Leu Gly Gly Arg Gln  
 100

<210> 3286

<211> 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

```

Met Leu Gly Ile Ser Ala Ile Gly Gly Leu Cys Cys Leu His Arg Leu
  1             5             10             15
Tyr Ser Cys Ile Pro Gly Glu Gly Gly Arg Ala Ala Lys Glu Lys Ser
          20             25             30
Gln Ser Gln Gln Pro Ala Leu Arg Pro Ser Lys Leu Cys Thr Gly Gly
          35             40             45
Leu Gly Ser Ala Leu Trp Ala Arg Gly Ala Gly Lys Arg Ala Gly Arg
          50             55             60
Gly Thr Ala Ala Thr Ser Ala Arg Ala Ala Gln Glu Ala Pro Pro Tyr
          65             70             75             80
Thr Ala Leu Gln Val Pro Gln Arg Glu Gln Pro Met Leu Pro Lys His
          85             90             95
Pro Leu His Thr His Gln Gly Ser Trp Arg Arg Glu Val Pro Gln Gly
          100            105            110
Lys Ala Pro Ser Pro Arg Arg Ala Ser Gly Pro Gly Leu Leu Trp Leu
          115            120            125
Pro Thr Ala Ile Ile Ser Ile Tyr Arg Ala Gln Ser
          130            135            140

```

&lt;210&gt; 3287

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3287

```

Met Ser Leu Leu Pro Asn Ser His Gln Ile Phe Leu Ile Glu Phe Leu
  1             5             10             15
Val Leu Val Pro Asp Arg Thr Asn Asp Ser Pro Asn Leu Pro Val Phe
          20             25             30
Met Arg Glu Lys Glu Lys Gly Ile Lys Gly Gly Arg Lys Lys Lys Pro
          35             40             45

```

Asn	Ser	Val	Tyr	Gly	Glu	Lys	Gly	Phe	Cys	Phe	Ser	Pro	Asn	Leu	Gly
50				55				60							
Gly	Gly	Arg	Gly	Gly	Phe	Ser	Phe	Tyr	Phe	Cys	Phe	Cys	Phe	Tyr	Leu
65				70				75				80			
Gly	Phe	Cys	Phe	Ser	His	Val	Tyr	Ser	Ala	Arg	Ser	Val	Glu	Gly	Gly
				85				90				95			
Leu	Gly	Glu	Gly	Glu	Leu	Glu	Lys	Glu	Leu	Met	Gly	Ser	Tyr	Pro	Gly
				100				105				110			
Leu															

&lt;210&gt; 3288

&lt;211&gt; 209

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3288

Met	Lys	Gly	Gly	Ala	Gly	Gly	Ala	Arg	Pro	Pro	Gly	Arg	Pro	Val
1				5					10				15	
Arg	Ser	Gly	Ala	Asn	Ala	Ile	Pro	Gly	Pro	Thr	Ala	Arg	Gly	Arg Cys
			20					25					30	
Gly	Pro	Pro	Asn	Pro	Pro	Pro	Arg	Pro	Gly	Trp	Gly	Gly	Gly	Ala Gly
			35					40					45	
Gly	Asp	Gln	Arg	Leu	Val	Ser	Leu	Arg	Ser	Asp	Leu	Arg	Gln	Arg Gly
	50					55					60			
Arg	Asp	Ile	Met	Thr	Val	Gly	Ala	Arg	Leu	Arg	Ser	Lys	Ala	Glu Ser
65					70					75				80
Ser	Leu	Leu	Arg	Arg	Gly	Pro	Arg	Gly	Arg	Gly	Arg	Thr	Glu	Gly Asp
				85					90				95	
Glu	Glu	Ala	Ala	Ala	Ile	Leu	Glu	His	Leu	Glu	Tyr	Ala	Asp	Glu Ala
		100						105					110	
Glu	Ala	Ala	Ala	Glu	Ser	Gly	Thr	Ser	Ala	Ala	Asp	Glu	Arg	Gly Pro
	115						120					125		
Gly	Thr	Arg	Gly	Ala	Arg	Arg	Val	His	Phe	Ala	Leu	Leu	Pro	Glu Arg
130						135						140		

Tyr Glu Pro Leu Glu Glu Pro Ala Pro Ser Glu Gln Pro Arg Lys Arg  
 145                      150                      155                      160  
 Tyr Arg Arg Arg Lys Leu Lys Lys Tyr Gly Lys Asn Val Gly Lys Val Ile  
                     165                      170                      175  
 Ile Lys Gly Cys Arg Tyr Val Val Ile Gly Leu Gln Gly Phe Ala Ala  
                     180                      185                      190  
 Ala Tyr Ser Ala Pro Phe Ala Val Ala Thr Ser Val Val Ser Phe Val  
                     195                      200                      205  
 Arg

<210> 3289

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3289

Met Lys Ala Trp Ser Asn Ala Met Trp Ser Ser Gly Lys Pro Gln Asn  
 1                      5                      10                      15  
 Gly Val Ser Ser Trp Thr Ser Cys Ile Arg Val His Thr Pro Gln Gly  
                     20                      25                      30  
 Leu Asn Pro Cys Pro Leu Ser Lys Glu Leu Gly Leu Asn Ala Val Arg  
                     35                      40                      45  
 Asp Cys Leu Phe Val Val Ile Phe Ile Glu Arg Ser Ser Phe Pro Leu  
                     50                      55                      60  
 Pro Pro Trp Leu Ser Gln Leu Val Val Ile Ala Asp Ser Phe Pro Glu  
                     65                      70                      75                      80  
 Arg Thr Phe Asn Arg Phe Lys Lys Asn Val Leu Asp Trp Val Pro Lys  
                     85                      90                      95  
 Lys Gln Ser Leu Lys Gln Gly Phe Val Cys Lys  
                     100                      105

<210> 3290

<211> 357

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3290

```

Met Leu Gln Gln Ile Leu His Asp Met Tyr Ile Asp Pro Glu Leu Leu
  1             5             10             15
Ala Glu Leu Ser Asp Val Gln Lys His Ile Leu Phe Tyr Lys Met Arg
      20             25             30
Glu Glu Gln Leu Arg Arg Trp Lys Glu Arg Glu Thr Trp Glu Ala Leu
      35             40             45
Ala Gln Asp Glu Gly Leu Arg Pro Pro Lys Thr Lys Arg Ala Ala Ser
      50             55             60
Asp Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val
      65             70             75             80
Trp Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser
      85             90             95
Glu Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala
      100            105            110
Glu Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg
      115            120            125
Asp Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys
      130            135            140
Val Glu Met Glu Gly Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile
      145            150            155            160
His Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu
      165            170            175
Glu Arg Ile Arg Leu Gln Glu Glu Gln Arg Ala Lys Glu Leu Tyr Trp
      180            185            190
Thr Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu
      195            200            205
Arg Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu
      210            215            220
Arg Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser
      225            230            235            240
Leu Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe
      245            250            255

```

Arg Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His  
                   260                                  265                                  270  
 Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Arg Thr  
                   275                                  280                                  285  
 Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp  
                   290                                  295                                  300  
 Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr  
 305                                  310                                  315                                  320  
 Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg  
                                   325                                  330                                  335  
 Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg  
                   340                                  345                                  350  
 Leu Pro Ser Val Val  
                   355

<210> 3291

<211> 158

<212> PRT

<213> Homo sapiens

<400> 3291

Met Gly Glu Ala Trp Phe Pro Glu Val Ala Pro Ser Leu Thr Ser Ser  
   1                                  5                                  10                                  15  
 Leu Gly Trp Glu Trp Gly Phe Leu Trp Leu Cys Val Ala Pro Arg Gly  
                   20                                  25                                  30  
 Ala Val Ala Pro Ser Ser Phe Ser Leu Phe Ser Val Gly Arg Val Val  
                   35                                  40                                  45  
 Phe Leu Met Ser Pro Asn Ala Ser Thr Trp Ile Phe Gln Leu Lys Met  
                   50                                  55                                  60  
 Leu Tyr Ser Leu Ala Ser Phe Val Pro Leu Cys Pro Phe Gly Ala Ser  
   65                                  70                                  75                                  80  
 Leu Leu Glu Phe Ala Gly Gly Pro Leu Leu Thr Leu Phe Ala Trp Val  
                                   85                                  90                                  95  
 Ser Pro Ala Glu Ala Ala Lys Gln Gln Arg Leu Leu Pro Val Leu Ser

100 105 110  
 Ser Arg Ser Phe Asp Pro Val Gly His Leu Ser Asp Ala Ser Gln Ser  
 115 120 125  
 Ser Pro Val Ser Gly Val Cys Arg Ser Lys Leu Glu Gly Ile Ser Gln  
 130 135 140  
 Ser Val Tyr Met Gly Ile Arg Asp Pro Leu Glu Glu Ala Asp  
 145 150 155

<210> 3292

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3292

Met Glu Met Ile Ala Phe Ala Arg Ile Phe Cys Lys Gly Gln Val Ser  
 1 5 10 15  
 Thr Ala Thr Phe Leu Glu Ser Cys Gly Val Ala Asp Leu Ile Thr Thr  
 20 25 30  
 Cys Tyr Gly Gly Arg Asn Arg Arg Val Ala Glu Ala Phe Ala Arg Thr  
 35 40 45  
 Gly Lys Thr Ile Glu Glu Leu Glu Lys Glu Met Leu Asn Gly Gln Lys  
 50 55 60  
 Leu Gln Gly Pro Gln Thr Ser Ala Glu Val Tyr Arg Ile Leu Lys Gln  
 65 70 75 80  
 Lys Gly Leu Leu Asp Lys Phe Pro Leu Phe Thr Ala Val Tyr Gln Ile  
 85 90 95  
 Cys Tyr Glu Ser Arg Pro Val Gln Glu Met Leu Ser Cys Leu Gln Ser  
 100 105 110  
 His Pro Glu His Thr  
 115

<210> 3293

<211> 111

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3293

Met Trp Ser Lys Gly Trp Ile Val Ile Ser Lys Glu Ile His Cys Leu  
 1 5 10 15  
 Ile His Phe Lys Lys Gly Leu Thr Ser Gln Leu His Gly Met Arg Ser  
 20 25 30  
 Ala Ala Ser Asn Cys Gln Leu Leu Gln Ser Leu Leu Gln Leu Gln Lys  
 35 40 45  
 Asp Thr Val Leu Glu Val Ile Pro Phe Pro Cys Leu Val Thr Glu Val  
 50 55 60  
 Gln Leu Asn Val Ala Ala Lys Val Thr Leu Met Pro Met Gly Ser Lys  
 65 70 75 80  
 Lys Ser Lys Ser Leu Asn Arg Ile Leu Arg Asn Pro Lys Ser Val Phe  
 85 90 95  
 Phe Gln His Met Thr Phe Trp Ser Ser Leu Leu Phe Ser Asn Arg  
 100 105 110

&lt;210&gt; 3294

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3294

Met Gly Cys Ser Pro Leu Ala Cys Ser Ser Thr Pro Leu His Pro Ser  
 1 5 10 15  
 Leu Ser Phe Gly Arg Ser Ala Ile Gln Ser Cys His Leu Phe Arg Met  
 20 25 30  
 Thr Phe Pro Phe Arg Ala Arg Cys Val Arg Phe Pro Gly Met Phe Pro  
 35 40 45  
 Ser Ser Pro Ser Ser Ser Trp Pro Gly Pro Ala Cys His Leu His Ala  
 50 55 60  
 Gly Val Cys Asp Cys Leu Val Leu Thr Arg Gly Val Gly Trp Trp Ser  
 65 70 75 80  
 Thr Ser Leu Gly Arg Gly Leu Ile Arg Pro Gly Val Ser Arg Phe His



85 90 95  
 Ala Leu Ser Ile Pro Asp His  
 100

<210> 3295

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3295

Met Val Tyr Ser Arg His Pro Lys Pro Val Ser Thr Ser His Lys Arg  
 1 5 10 15  
 His Val Ser His Arg Ala Gly Asn Pro Gly Pro Ser Pro Gly Thr Ser  
 20 25 30  
 Gly Pro Ile Ser Ala Pro Asp Leu Pro Cys Ser Leu Ala Trp Asp Leu  
 35 40 45  
 Ser Tyr Ser Trp Ala Val Asp His Val Pro Leu Pro Ala Leu Thr Cys  
 50 55 60  
 Pro Leu Thr Gly Asp Ser Glu Gly Pro His Leu Pro Arg Cys His Ser  
 65 70 75 80  
 Thr Trp His Leu Met Arg Lys Ala Thr Gln Arg Lys Gly Leu Tyr Ser  
 85 90 95  
 Ser Asp Phe Arg Gly Lys Thr Thr Gln Met Lys Gly Thr Thr Ile  
 100 105 110

<210> 3296

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3296

Met Gly Val Ala Arg Met Gly Ser His Gly Ser Val Arg Ala Glu Ala  
 1 5 10 15  
 Arg Phe Glu Leu Arg Pro Thr Pro Arg His Ser Ala Cys Tyr Pro Gly

20 25 30  
 Cys Pro Pro Pro Gly Cys His His His Ala Arg Gly Ala Ala Ser Pro  
 35 40 45  
 Gly Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Thr  
 50 55 60  
 Glu Ser His Arg Leu Arg Phe Gln Arg Arg Asn Leu Val Ser Glu Asn  
 65 70 75 80  
 Pro Ala Leu Arg Arg Ala Gly Ala Glu Arg Ser Arg His Trp Pro Glu  
 85 90 95  
 Gly Gly Leu Ser Thr Tyr Lys Pro Thr Glu Ala Ser Val Ser Val Val  
 100 105 110  
 Leu Phe Val Val Ser Gln Ala Leu Gly Ser Trp Leu Gly Val Arg Val  
 115 120 125  
 Arg Ser Ser Thr Cys Lys Gln Gly Cys Leu Pro Leu Ser Thr Leu Ala  
 130 135 140

<210> 3297

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3297

Met Thr Leu Ala Ser His Pro Arg Pro Glu Gly Leu His Ser Arg Gln  
 1 5 10 15  
 Trp Ser Gly Ser Gln Asp Ser Gln Met Gly Phe Pro Arg Ala Asp Pro  
 20 25 30  
 Ala Ser Asp Arg Ala Ser Leu Phe Val Ala Arg Thr Arg Arg Ser Asn  
 35 40 45  
 Ser Ser Glu Ala Leu Leu Val Asp Arg Ala Ala Gly Gly Gly Ala Gly  
 50 55 60  
 Ser Pro Pro Ala Pro Leu Ala Pro Ser Ala Ser Gly Pro Pro Val Cys  
 65 70 75 80  
 Lys Ser Ser Glu Val Leu Tyr Glu Arg Pro Gln Pro Thr Pro Ala Phe  
 85 90 95  
 Ser Ser Arg Thr Ala Gly Pro Pro Asp Pro Pro Arg Ala Ala Arg Pro

100	105	110	
Ser Ser Ala Ala Pro Ala Ser Arg Gly Ala Pro Arg Leu Pro Pro Val			
115	120	125	
Cys Gly Asp Phe Leu Leu Asp Tyr Ser Leu Asp Arg Gly Leu Pro Arg			
130	135	140	
Ser Gly Gly Gly Thr Gly Trp Gly Glu Leu Pro Pro Ala Ala Glu Val			
145	150	155	160
Pro Gly Pro Leu Ser Arg Arg Asp Gly Leu Leu Thr Met Leu Pro Gly			
165	170	175	
Pro Pro Pro Val Tyr Ala Ala Asp Ser Asn Ser Pro Leu Leu Arg Thr			
180	185	190	
Lys Asp Pro His Thr Arg Ala Thr Arg Thr Lys Pro Cys Gly Leu Pro			
195	200	205	
Pro Glu Ala Ala Glu Gly Pro Glu Val His Pro Asn Pro Leu Leu Trp			
210	215	220	
Met Pro Pro Pro Thr Arg Ile Pro Ser Ala Gly Glu Arg Ser Gly His			
225	230	235	240
Lys Asn Leu Ala Leu Glu Gly Leu Arg Asp Trp Tyr Ile Arg Asn Ser			
245	250	255	
Gly Leu Ala Ala Gly Pro Gln Arg Arg Pro Val Leu Pro Ser Val Gly			
260	265	270	
Pro Pro His Pro Pro Phe Leu His Ala Arg Cys Tyr Glu Val Gly Gln			
275	280	285	
Ala Leu Tyr Gly Ala Pro Ser Gln Ala Pro Leu Pro His Ser Arg Ser			
290	295	300	
Phe Thr Ala Pro Pro Val Ser Gly Arg Tyr Gly Gly Cys Phe Tyr			
305	310	315	

&lt;210&gt; 3298

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3298

Met Ile Val Glu His Leu Ser Glu Pro Lys Ser Leu Gly Glu Cys Gly

1                    5                    10                    15  
 Asp Phe Leu Glu Gly Gly Cys Arg Leu Pro Glu Ser Pro Pro Asn Gly  
                   20                    25                    30  
 Arg Ala Glu Lys Gly Glu Gly Gly Gly Cys Ser Gln Glu Gly Ala  
                   35                    40                    45  
 Arg Glu Glu Gln Gly Leu Gly Ala Ser Arg Asn Met Pro Ala Val Gly  
                   50                    55                    60  
 Gly Arg Gly Arg Gly Ala Thr Val Asn Gly Phe Pro Ser Glu Val Val  
                   65                    70                    75                    80  
 Gly Ala Asp Gly Ser Phe Cys Leu Leu Ala Leu Lys Arg Val Phe Cys  
                   85                    90                    95  
 Gln Gly His Ser Leu Phe Leu Leu Arg Lys His Pro Pro Asn Ala Asn  
                   100                    105                    110  
 Asn Ile Pro Thr Ser Cys  
                   115

<210> 3299

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3299

Met Arg Arg Gly Ala Pro Arg Pro Gly Pro Pro Thr Pro Ala Leu Pro  
 1                    5                    10                    15  
 Gly Pro Pro Leu Trp Ala Ser Val Ser Ile Pro Ala Pro Gly Lys Gly  
                   20                    25                    30  
 Gly Arg Leu Glu Ser Arg Ser Arg Ala Arg Ser Pro Gly Val Pro Ala  
                   35                    40                    45  
 Ala Ala Glu Cys Lys Val Ala Ala Phe Ser Leu Leu Arg Gly Ile Ser  
                   50                    55                    60  
 Glu Ile Ser Gln Glu Gly Thr Phe Gly Arg Phe Trp Gly Gln Leu Gly  
                   65                    70                    75                    80  
 Ser Asn Arg Gly Ser Arg Thr Pro Lys Gly Glu Ser Pro Ala Ser Glu  
                   85                    90                    95  
 Asp Gly Glu Glu Gly Gly Ala Leu Ala Lys Gly Ala Leu Pro Tyr Gln

100	105	110
Pro Gly Leu Leu Lys Arg Gly Asp Phe Glu Trp Val Thr Ser Pro Ala		
115	120	125
Trp Ala Arg Ser Val Glu Gly Gly Pro Ala Gln Arg Val Asn Arg Leu		
130	135	140
Glu Val Cys Asp Gln Gly Gln Pro Ala Val Arg Ala Cys Gly Arg		
145	150	155

&lt;210&gt; 3300

&lt;211&gt; 461

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

Met Gly Asp Arg Ser Gly Gln Gln Glu Arg Ser Val Pro His Ser Pro			
1	5	10	15
Gly Ala Pro Val Gly Thr Ser Ala Ala Ala Val Asn Glu Leu Leu His			
20	25	30	
Asn Gly Phe His Pro Pro Pro Val Gln Pro Pro His Val Cys Ser Arg			
35	40	45	
Gly Pro Val Gly Gly Ser Asp Ala Ala Pro Gln Arg Leu Pro Leu Leu			
50	55	60	
Pro Glu Leu Gln Pro Gln Pro Leu Leu Pro Gln His Asp Ser Pro Ala			
65	70	75	80
Lys Lys Cys Arg Leu Arg Arg Arg Met Asp Ser Gly Arg Lys Asn Arg			
85	90	95	
Pro Pro Phe Pro Trp Phe Gly Met Asp Ile Gly Gly Thr Leu Val Lys			
100	105	110	
Leu Val Tyr Phe Glu Pro Lys Asp Ile Thr Ala Glu Glu Glu Gln Glu			
115	120	125	
Glu Val Glu Asn Leu Lys Ser Ile Arg Lys Tyr Leu Thr Ser Asn Thr			
130	135	140	
Ala Tyr Gly Lys Thr Gly Ile Arg Asp Val His Leu Glu Leu Lys Asn			
145	150	155	160
Leu Thr Met Cys Gly Arg Lys Gly Asn Leu His Phe Ile Arg Phe Pro			

165	170	175
Ser Cys Ala Met His Arg Phe Ile Gln Met Gly Ser Glu Lys Asn Phe		
180	185	190
Ser Ser Leu His Thr Thr Leu Cys Ala Thr Gly Gly Gly Ala Phe Lys		
195	200	205
Phe Glu Glu Asp Phe Arg Met Ile Ala Asp Leu Gln Leu His Lys Leu		
210	215	220
Asp Glu Leu Asp Cys Leu Ile Gln Gly Leu Leu Tyr Val Asp Ser Val		
225	230	235
Gly Phe Asn Gly Lys Pro Glu Cys Tyr Tyr Phe Glu Asn Pro Thr Asn		
245	250	255
Pro Glu Leu Cys Gln Lys Lys Pro Tyr Cys Leu Asp Asn Pro Tyr Pro		
260	265	270
Met Leu Leu Val Asn Met Gly Ser Gly Val Ser Ile Leu Ala Val Tyr		
275	280	285
Ser Lys Asp Asn Tyr Lys Arg Val Thr Gly Thr Ser Leu Gly Gly Gly		
290	295	300
Thr Phe Leu Gly Leu Cys Cys Leu Leu Thr Gly Cys Glu Thr Phe Glu		
305	310	315
Glu Ala Leu Glu Met Ala Ala Lys Gly Asp Ser Thr Asn Val Asp Lys		
325	330	335
Leu Val Lys Asp Ile Tyr Gly Gly Asp Tyr Glu Arg Phe Gly Leu Gln		
340	345	350
Gly Ser Ala Val Ala Ser Ser Phe Gly Asn Met Met Ser Lys Glu Lys		
355	360	365
Arg Asp Ser Ile Ser Lys Glu Asp Leu Ala Arg Ala Thr Leu Val Thr		
370	375	380
Ile Thr Asn Asn Ile Gly Ser Ile Ala Arg Met Cys Ala Leu Asn Glu		
385	390	395
Asn Ile Asp Arg Val Val Phe Val Gly Asn Phe Leu Arg Ile Asn Met		
405	410	415
Val Ser Met Lys Leu Leu Ala Tyr Ala Met Asp Phe Trp Ser Lys Gly		
420	425	430
Gln Leu Lys Ala Leu Phe Leu Glu His Glu Gly Tyr Phe Gly Ala Val		
435	440	445
Gly Ala Leu Leu Glu Leu Phe Lys Met Thr Asp Asp Lys		

450

455

460

&lt;210&gt; 3301

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

```

Met Thr Val Leu His Tyr Leu Asp Ser Ala Gln Glu Ala Thr Met Met
  1              5              10              15
Tyr Gln Tyr Ser Gln His Leu Asp Asp Val Thr Leu Leu Cys Leu Gly
          20              25              30
Pro Val Tyr Ile Val Tyr Glu Thr Tyr Val Trp Val His His Leu Val
          35              40              45
Asp Val Thr Leu Leu His Gly Leu Cys Pro Trp Arg Cys Glu Ile Phe
          50              55              60
Phe His Ser Ser Pro Ala Ile Ser Leu Leu Cys Leu Phe Cys Leu Gly
          65              70              75              80
Leu Ala Lys Lys Arg Ile Ile Val Tyr His Trp Thr Gln Asn Leu Gly
          85              90              95
Glu Val Thr Pro Ile Leu Pro Gly Ala His Ile Phe Gly Tyr Cys Asp
          100             105             110
Ile Gly Asp Gly Trp Glu Ala His Glu Trp Ala Leu Leu Thr Glu Gly
          115             120             125
Leu Val Thr Ser Gln His Ser Leu Pro Arg Lys Cys Asp Tyr Cys Leu
          130             135             140
Pro Phe Ala Pro Cys Leu Gln Gly Arg Leu
          145             150

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&lt;210&gt; 3302

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3302

Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser Asn Lys Pro Pro Thr  
 1 5 10 15  
 Leu Ala Ser Gln Val Ala Gly Thr Ile Gly Thr His His His Val Arg  
 20 25 30  
 Pro Ile Phe Val Phe Phe Lys Glu Thr Gly Cys His Cys Val Ala Gln  
 35 40 45  
 Ala Gly Leu Gln Leu Leu Gly Ser Ser Asn Leu Ser Ala Leu Val Ser  
 50 55 60  
 Gln Thr Ala Gly Ser Ile Val Val Asn Gln Arg Ala Gln Pro Pro Ser  
 65 70 75 80  
 Leu Ser Val Ser Val Phe Leu Cys Ser Ser Leu Ser Leu Leu Phe Leu  
 85 90 95  
 Ser Leu Pro Ile Ser Leu Ser Phe Leu Ser Val Ser Ala Ser Val Cys  
 100 105 110  
 Val Cys Phe Leu Ser Leu Phe Ser Val Cys Leu Cys Leu Pro Leu Pro  
 115 120 125  
 Val Ser Pro Leu Val Cys Ala Ser Leu Cys Leu Ser Leu Ala Leu Leu  
 130 135 140  
 Cys Leu Ser Leu Phe Leu Gln Arg Ala Phe Pro His Val Tyr Pro Leu  
 145 150 155 160  
 Val Pro Pro Tyr Ser Val Leu Pro Tyr Pro Gly Ser Ser Tyr Leu Ser  
 165 170 175  
 Ala Phe Leu Glu Pro Gly Asp  
 180

&lt;210&gt; 3303

&lt;211&gt; 650

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3303

Met Ala Arg Ser Pro Thr Thr His Pro Pro Ala Asn Thr Tyr Leu Pro  
 1 5 10 15  
 Gln Tyr Gly Gly Tyr Gly Ala Gly Gln Ser Val Phe Ala Pro Thr Lys



20	25	30
Pro Phe Thr Gly Gln Asp Cys Ala Asn Ser Lys Asp Cys Ser Phe Ala		
35	40	45
Tyr Gly Ser Gly Asn Ser Leu Pro Ala Ser Pro Ser Ser Ala His Ser		
50	55	60
Ala Gly Tyr Ala Pro Pro Pro Thr Gly Gly Pro Cys Leu Pro Pro Ser		
65	70	75
Lys Ala Ser Phe Phe Ser Ser Ser Glu Gly Ala Pro Phe Ser Gly Ser		
85	90	95
Ala Pro Thr Pro Leu Arg Cys Asp Ser Arg Ala Ser Thr Val Ser Pro		
100	105	110
Gly Gly Tyr Met Val Pro Lys Gly Thr Thr Ala Ser Ala Thr Ser Ala		
115	120	125
Ala Ser Ala Ala Ser Ser Ser Ser Ser Ser Phe Gln Pro Ser Pro Glu		
130	135	140
Asn Cys Arg Gln Phe Ala Gly Ala Ser Gln Trp Pro Phe Arg Gln Gly		
145	150	155
Tyr Gly Gly Leu Asp Trp Ala Ser Glu Ala Phe Ser Gln Leu Tyr Asn		
165	170	175
Pro Ser Phe Asp Cys His Val Ser Glu Pro Asn Val Ile Leu Asp Ile		
180	185	190
Ser Asn Tyr Thr Pro Gln Lys Val Lys Gln Gln Thr Ala Val Ser Glu		
195	200	205
Thr Phe Ser Glu Ser Ser Ser Asp Ser Thr Gln Phe Asn Gln Pro Val		
210	215	220
Gly Gly Gly Gly Phe Arg Arg Ala Asn Ser Glu Ala Ser Ser Ser Glu		
225	230	235
Gly Gln Ser Ser Leu Ser Ser Leu Glu Lys Leu Met Met Asp Trp Asn		
245	250	255
Glu Ala Ser Ser Ala Pro Gly Tyr Asn Trp Asn Gln Ser Val Leu Phe		
260	265	270
Gln Ser Ser Ser Lys Pro Gly Arg Gly Arg Arg Lys Lys Val Asp Leu		
275	280	285
Phe Glu Ala Ser His Leu Gly Phe Pro Thr Ser Ala Ser Ala Ala Ala		
290	295	300
Ser Gly Tyr Pro Ser Lys Arg Ser Thr Gly Pro Arg Gln Pro Arg Gly		

305	310	315	320
Gly Arg Gly Gly Gly Ala Cys Ser Ala Lys Lys Glu Arg Gly Gly Ala			
325	330	335	
Ala Ala Lys Ala Lys Phe Ile Pro Lys Pro Gln Pro Val Asn Pro Leu			
340	345	350	
Phe Gln Asp Ser Pro Asp Leu Gly Leu Asp Tyr Tyr Ser Gly Asp Ser			
355	360	365	
Ser Met Ser Pro Leu Pro Ser Gln Ser Arg Ala Phe Gly Val Gly Glu			
370	375	380	
Arg Asp Pro Cys Asp Phe Ile Gly Pro Tyr Ser Met Asn Pro Ser Thr			
385	390	395	400
Pro Ser Asp Gly Thr Phe Gly Gln Gly Phe His Cys Asp Ser Pro Ser			
405	410	415	
Leu Gly Ala Pro Glu Leu Asp Gly Lys His Phe Pro Pro Leu Ala His			
420	425	430	
Pro Pro Thr Val Phe Asp Ala Gly Leu Gln Lys Ala Tyr Ser Pro Thr			
435	440	445	
Cys Ser Pro Thr Leu Gly Phe Lys Glu Glu Leu Arg Pro Pro Pro Thr			
450	455	460	
Lys Leu Ala Ala Cys Glu Pro Leu Lys His Gly Leu Gln Gly Ala Ser			
465	470	475	480
Leu Gly His Ala Ala Ala Ala Gln Ala His Leu Ser Cys Arg Asp Leu			
485	490	495	
Pro Leu Gly Gln Pro His Tyr Asp Ser Pro Ser Cys Lys Gly Thr Ala			
500	505	510	
Tyr Trp Tyr Pro Pro Gly Ser Ala Ala Arg Ser Pro Pro Tyr Glu Gly			
515	520	525	
Lys Val Gly Thr Gly Leu Leu Ala Asp Phe Leu Gly Arg Thr Glu Ala			
530	535	540	
Ala Cys Leu Ser Ala Pro His Leu Ala Ser Pro Pro Ala Thr Pro Lys			
545	550	555	560
Ala Asp Lys Glu Pro Leu Glu Met Ala Arg Pro Pro Gly Pro Pro Arg			
565	570	575	
Gly Pro Ala Ala Ala Ala Ala Gly Tyr Gly Cys Pro Leu Leu Ser Asp			
580	585	590	
Leu Thr Leu Ser Pro Val Pro Arg Asp Ser Leu Leu Pro Leu Gln Asp			

595                      600                      605  
 Thr Ala Tyr Arg Tyr Pro Gly Phe Met Pro Gln Ala His Pro Gly Leu  
 610                      615                      620  
 Gly Gly Gly Pro Lys Ser Gly Phe Leu Gly Pro Met Ala Glu Pro His  
 625                      630                      635                      640  
 Pro Glu Asp Thr Phe Thr Val Thr Ser Leu  
 645                      650

<210> 3304

<211> 893

<212> PRT

<213> Homo sapiens

<400> 3304

Met Gly Arg Met Gly Lys Gly Cys Pro Ala Ser Gly Pro Arg Ser Trp  
 1                      5                      10                      15  
 Leu Leu Ser Asp Glu Leu Val Gln Gly Ser Arg Ala Gly Val Ser Ala  
 20                      25                      30  
 Ser Phe Pro Val Gly Phe Arg Glu Gly Gly Gly Gly Gly Asp Phe Arg  
 35                      40                      45  
 Arg Gly Asp Val Gly Leu Gln Asp Gly Gly Val Arg Val Arg Val Ile  
 50                      55                      60  
 Ile Phe Ala Phe Ser Leu His Ser Leu Leu Ser Arg Phe Leu Pro Gly  
 65                      70                      75                      80  
 Gly Asp Ala Ser Leu Met Glu Leu Glu Lys Arg Lys Glu Asn Arg Phe  
 85                      90                      95  
 Val Glu Arg Gln Ser Ile Val Pro Leu Arg Leu Ile Tyr Arg Ser Gly  
 100                      105                      110  
 Gly Glu Asp Glu Ser Arg His Asp Ala Leu Asp Thr Arg Val Arg Gly  
 115                      120                      125  
 Asp Leu Gly Gly Arg Gln Leu Thr His Val Asp Gln Ala Ser Phe Gln  
 130                      135                      140  
 Val Asp Ala Phe Gly Thr Ser Phe Ile Leu Asp Val Val Leu Asn His  
 145                      150                      155                      160  
 Asp Leu Leu Ser Ser Glu Tyr Ile Glu Arg His Ile Glu His Gly Gly

165	170	175
Lys Thr Val Glu Val Lys Gly Gly Glu His Cys Tyr Tyr Gln Gly His		
180	185	190
Ile Arg Gly Asn Pro Asp Ser Phe Val Ala Leu Ser Thr Cys His Gly		
195	200	205
Leu His Gly Met Phe Tyr Asp Gly Asn His Thr Tyr Leu Ile Glu Pro		
210	215	220
Glu Glu Asn Asp Thr Thr Gln Glu Asp Phe His Phe His Ser Val Tyr		
225	230	235
Lys Ser Arg Leu Phe Glu Phe Ser Leu Asp Asp Leu Pro Ser Glu Phe		
245	250	255
Gln Gln Val Asn Ile Thr Pro Ser Lys Phe Ile Leu Lys Pro Arg Pro		
260	265	270
Lys Arg Ser Lys Arg Gln Leu Arg Arg Tyr Pro Arg Asn Val Glu Glu		
275	280	285
Glu Thr Lys Tyr Ile Glu Leu Met Ile Val Asn Asp His Leu Met Phe		
290	295	300
Lys Lys His Arg Leu Ser Val Val His Thr Asn Thr Tyr Ala Lys Ser		
305	310	315
Val Val Asn Met Ala Asp Leu Ile Tyr Lys Asp Gln Leu Lys Thr Arg		
325	330	335
Ile Val Leu Val Ala Met Glu Thr Trp Ala Thr Asp Asn Lys Phe Ala		
340	345	350
Ile Ser Glu Asn Pro Leu Ile Thr Leu Arg Glu Phe Met Lys Tyr Arg		
355	360	365
Arg Asp Phe Ile Lys Glu Lys Ser Asp Ala Val His Leu Phe Ser Gly		
370	375	380
Ser Gln Phe Glu Ser Ser Arg Ser Gly Ala Ala Tyr Ile Gly Gly Ile		
385	390	395
Cys Ser Leu Leu Lys Gly Gly Gly Val Asn Glu Phe Gly Lys Thr Asp		
405	410	415
Leu Met Ala Val Thr Leu Ala Gln Ser Leu Ala His Asn Ile Gly Ile		
420	425	430
Ile Ser Asp Lys Arg Lys Leu Ala Ser Gly Glu Cys Lys Cys Glu Asp		
435	440	445
Thr Trp Ser Gly Cys Ile Met Gly Asp Thr Gly Tyr Tyr Leu Pro Lys		

450	455	460	
Lys Phe Thr Gln Cys Asn Ile Glu Glu Tyr His Asp Phe Leu Asn Ser			
465	470	475	480
Gly Gly Gly Ala Cys Leu Phe Asn Lys Pro Ser Lys Leu Leu Asp Pro			
	485	490	495
Pro Glu Cys Gly Asn Gly Phe Ile Glu Thr Gly Glu Glu Cys Asp Cys			
	500	505	510
Gly Thr Pro Ala Glu Cys Val Leu Glu Gly Ala Glu Cys Cys Lys Lys			
	515	520	525
Cys Thr Leu Thr Gln Asp Ser Gln Cys Ser Asp Gly Leu Cys Cys Lys			
	530	535	540
Lys Cys Lys Phe Gln Pro Met Gly Thr Val Cys Arg Glu Ala Val Asn			
545	550	555	560
Asp Cys Asp Ile Arg Glu Thr Cys Ser Gly Asn Ser Ser Gln Cys Ala			
	565	570	575
Pro Asn Ile His Lys Met Asp Gly Tyr Ser Cys Asp Gly Val Gln Gly			
	580	585	590
Ile Cys Phe Gly Gly Arg Cys Lys Thr Arg Asp Arg Gln Cys Lys Tyr			
	595	600	605
Ile Trp Gly Gln Lys Val Thr Ala Ser Asp Lys Tyr Cys Tyr Glu Lys			
	610	615	620
Leu Asn Ile Glu Gly Thr Glu Lys Gly Asn Cys Gly Lys Asp Lys Asp			
625	630	635	640
Thr Trp Ile Gln Cys Asn Lys Arg Asp Val Leu Cys Gly Tyr Leu Leu			
	645	650	655
Cys Thr Asn Ile Gly Asn Ile Pro Arg Leu Gly Glu Leu Asp Gly Glu			
	660	665	670
Ile Thr Ser Thr Leu Val Val Gln Gln Gly Arg Thr Leu Asn Cys Ser			
	675	680	685
Gly Gly His Val Lys Leu Glu Glu Asp Val Asp Leu Gly Tyr Val Glu			
	690	695	700
Asp Gly Thr Pro Cys Gly Pro Gln Met Met Cys Leu Glu His Arg Cys			
705	710	715	720
Leu Pro Val Ala Ser Phe Asn Phe Ser Thr Cys Leu Ser Ser Lys Glu			
	725	730	735
Gly Thr Ile Cys Ser Gly Asn Gly Val Cys Ser Asn Glu Leu Lys Cys			

740	745	750
Val Cys Asn Arg His Trp Ile Gly Ser Asp Cys Asn Thr Tyr Phe Pro		
755	760	765
His Asn Asp Asp Ala Lys Thr Gly Ile Thr Leu Ser Gly Asn Gly Val		
770	775	780
Ala Gly Thr Asn Ile Ile Ile Gly Ile Ile Ala Gly Thr Ile Leu Val		
785	790	795
Leu Ala Leu Ile Leu Gly Ile Thr Ala Trp Gly Tyr Lys Asn Tyr Arg		
805	810	815
Glu Gln Arg Gln Leu Pro Gln Gly Asp Tyr Val Lys Lys Pro Gly Gly		
820	825	830
Gly Asp Ser Phe Tyr Ser Asp Ile Pro Pro Gly Val Ser Thr Asn Ser		
835	840	845
Ala Ser Ser Ser Lys Lys Arg Ser Asn Gly Leu Ser His Ser Trp Ser		
850	855	860
Glu Arg Ile Pro Asp Thr Lys His Ile Ser Asp Ile Cys Glu Asn Gly		
865	870	875
Arg Pro Arg Ser Asn Ser Trp Gln Gly Asn Leu Gly Gly		
885	890	

&lt;210&gt; 3305

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3305

Met Phe Leu Gln Pro Ser Thr Pro Ser Ser Phe Ala Ser His Pro Ser
1 5 10 15
Leu Leu Leu His Leu Phe Ser Tyr Ile His Tyr Gly Phe Pro Phe Phe
20 25 30
Gln Lys Ser Thr Ser Ser Leu Thr Phe Gly Asp Gly Gly Arg Val Pro
35 40 45
Gln Ile Val Pro Asp Leu Ala Ser Glu Ser Pro Phe Glu Cys Leu Leu
50 55 60
Tyr Pro Ser Ile Phe Gly Ser Thr Pro Leu Ile Ser Asp Leu Thr Arg

65                      70                      75                      80  
 Cys Ser Gly Pro Leu Gly Thr Ser His Gly Ser Val Phe Val Pro Gly  
                             85                      90                      95  
 Ala Leu Val Pro Gly Thr Arg Cys Ala Tyr Cys Ser Trp Gly Val Phe  
                             100                      105                      110  
 Ala Ser Cys Pro Ile Asp Asp  
                             115

<210> 3306

<211> 208

<212> PRT

<213> Homo sapiens

<400> 3306

Met Ser His Pro Ala Trp Thr Pro Cys Arg Ala Ser Pro Lys Arg Gln  
   1                      5                      10                      15  
 Trp Thr Gln Ala Gly Ser Ser Thr Cys Thr Pro Ala Leu Arg His Ala  
                             20                      25                      30  
 Phe Ser Leu Asp Val Ala Ser Ala Trp Val Leu Pro Leu Arg Thr Ser  
                             35                      40                      45  
 Arg Gly Ala Gly Gly Ala Ala Cys Cys His Pro His Trp Gly His Lys  
                             50                      55                      60  
 Thr Ser Ala Val Glu Gly Ala Gln Ser Gln Leu His Pro Gly Pro Ser  
   65                      70                      75                      80  
 Thr Ala Pro Arg Cys Gln Val Leu Leu Pro His Ser Pro Gly Pro Trp  
                             85                      90                      95  
 Pro Ala Gly Ala Gly Ala Thr Pro Ala Trp Gly Pro Ala Glu Gly Gly  
                             100                      105                      110  
 Trp Ala Ser Ser Gln Asp Pro Gln His Leu Leu Leu Glu Arg Gly Gly  
                             115                      120                      125  
 Arg Ala Ser Asp Pro Val Pro Ala Arg Trp Glu Gln Asp Thr Asp Gly  
                             130                      135                      140  
 Phe Val Leu Met Ala Asn Ala Ser Glu Met Asp Arg Gln Ser His Pro  
   145                      150                      155                      160  
 Val Ala Phe Thr Val Thr Ile Leu Pro Val Asn Gly Gln Pro Pro Thr

	165	170	175
Ser Tyr Lys Leu Arg Pro Ala Gly Ala Leu Asp Gly Gly Ile His Phe			
	180	185	190
Gly Leu Ser Asp Gly Glu His Thr Ser Ser Arg His Leu Ser Ser Glu			
	195	200	205

&lt;210&gt; 3307

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3307

Met Leu Thr Leu His Gly Ala Ser Ser Arg Phe Pro Gly Lys Ser Gly			
1	5	10	15
Ser Arg Arg Ser Ser Leu Ile Ser Gln Pro Leu Trp Arg Arg Glu Tyr			
	20	25	30
Gln Lys Gln Asp Glu Ser Gln Val Lys Ser Leu Ser Leu Gly Ser Pro			
	35	40	45
Lys Gly Gln Val Leu Thr Ser Gln Arg Pro Gly Pro Ala Gly Pro His			
	50	55	60
Gly Ser Thr Thr Pro Ser Arg Cys Pro Arg Pro Phe Val Ser His Pro			
	65	70	75
Ala Phe Ser Arg Ile Ser Lys Asp Ala Arg Leu Asp Pro Gln Ser Trp			
	85	90	95
Lys Thr Ala Val Pro Gly Ser His Gln Asn Gly Glu Ala Ser Ser Ser			
	100	105	110
His			

&lt;210&gt; 3308

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 3308

Met Lys Leu Arg Cys Tyr Leu Lys Leu Thr Ala Pro Asn Arg Pro Asp  
 1 5 10 15  
 Ser Gln Cys Pro Pro Arg Thr Ser Val Pro Ala Asp Leu Ala Ser Gly  
 20 25 30  
 Val Thr Ser Gly Glu Pro Phe Lys Ser Pro His Leu Ala Ser His Ser  
 35 40 45  
 Trp Pro Thr Leu Cys Ser Arg Ala Asn Gln Val Ala Asn Asp Lys Arg  
 50 55 60  
 Leu Ser Trp Pro Asn Ser Ser Leu Ala Trp Ile Thr Pro Ile Arg Cys  
 65 70 75 80  
 Gln Arg Cys Leu Leu Arg Trp Lys Asn Gln Ser Gly Ser Gly Val Arg  
 85 90 95  
 His Gln Gly Lys Gln Ala Asp Leu Glu Glu Ile Lys Tyr Ala Cys Ser  
 100 105 110  
 Leu Pro Ile Gln Val  
 115

&lt;210&gt; 3309

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3309

Met Val Pro Arg Pro Leu Gln Thr Arg Val Pro Gly Cys Phe Ser Lys  
 1 5 10 15  
 Gly Cys Glu Gly Thr Gly Gln Arg Gly Trp Val Trp Gly Arg Glu His  
 20 25 30  
 Ile Asp Val Gly Ala His Ser Val Gly Thr Gly Arg Gln Leu Leu Cys  
 35 40 45  
 Gln Ala Phe Ile Phe Pro Ile Leu Tyr Met Arg Lys Leu Gly Ser Gly  
 50 55 60  
 Gly Glu Gly Cys Leu Ala Asp Val Trp Pro Gly Gly Gly Pro Gly  
 65 70 75 80  
 Leu Glu Pro Gln Ala Pro Pro Ser Ser Cys Lys Ser Pro Ala Gln Arg

85 90 95  
 Arg Gly Gly Ser Trp Gly Leu Ser Ser Leu Gln Asp Arg Val His Leu  
 100 105 110  
 Ser Ser Ser Ile Ile His Ser Phe Ile His Ser Phe Asn Lys Cys Leu  
 115 120 125  
 Ala Ser Gly  
 130

<210> 3310

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3310

Met Leu Ala Glu Trp Gly Ala Cys Leu Leu Leu Ala Val Ala Leu Leu  
 1 5 10 15  
 Gly Pro Gly Leu Gln Ala Gln Ala Met Glu Gly Val Lys Cys Gly Gly  
 20 25 30  
 Val Leu Ser Ala Pro Ser Gly Asn Phe Ser Ser Pro Asn Phe Pro Arg  
 35 40 45  
 Leu Tyr Pro Tyr Asn Thr Glu Cys Ser Trp Leu Ile Val Val Ala Glu  
 50 55 60  
 Gly Ser Ser Val Leu Leu Thr Phe His Ala Phe Asp Leu Glu Tyr His  
 65 70 75 80  
 Asp Thr Cys Ser Phe Asp Phe Leu Glu Ile Tyr Asn Gly Ala Ser Pro  
 85 90 95  
 Asp Lys Gly Asn Leu Leu Gly Arg Phe Cys Gly Lys Val Pro Pro Pro  
 100 105 110  
 Pro Phe Thr Ser Ser Trp His Val Met Ser Val Ile Phe His Ser Asp  
 115 120 125  
 Lys His Val Ala Ser His Gly Phe Ser Ala Gly Tyr Gln Lys Gly Gln  
 130 135 140  
 Arg Gly Ala Leu Gly Thr Cys Cys Ser Gly Ser His Leu  
 145 150 155

&lt;210&gt; 3311

&lt;211&gt; 630

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3311

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Met Lys Ile Gly Gln Gly Lys Tyr Glu Pro Gly Phe Phe Pro Lys Leu
  1             5             10             15
Gln Ser Asp Val Leu Ser Thr Gly Pro Ala Ser Asn Lys Trp Thr Lys
      20             25             30
Arg Asn Ala Pro Ala Gln Trp Arg Arg Lys Asp Arg Gln Lys Gln His
      35             40             45
Thr Glu His Leu Arg Leu Asp Asn Asp Gln Arg Glu Lys Tyr Ile Gln
      50             55             60
Glu Ala Arg Thr Met Gly Ser Thr Ile Arg Gln Pro Lys Leu Ser Asn
      65             70             75             80
Leu Ser Pro Ser Val Ile Ala Gln Thr Asn Trp Lys Phe Val Glu Gly
      85             90             95
Leu Leu Lys Glu Cys Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys
      100            105            110
Met Gly Arg Glu Ala Val Glu Leu Gly His Gly Glu Val Asn Ile Thr
      115            120            125
Gly Val Glu Glu Asn Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu
      130            135            140
Arg Ile Trp Ser His Gly Leu Gln Val Lys Gln Gly Lys Ser Ala Leu
      145            150            155            160
Trp Ser His Leu Leu His Tyr Gln Asp Asn Arg Gln Arg Lys Leu Thr
      165            170            175
Ser Gly Ser Leu Ser Thr Ser Gly Ile Leu Leu Asp Ser Glu Arg Arg
      180            185            190
Lys Ser Asp Ala Ser Ser Leu Met Pro Pro Leu Arg Ile Ser Leu Ile
      195            200            205
Gln Asp Met Arg His Ile Gln Asn Ile Gly Glu Ile Lys Thr Asp Val
      210            215            220

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Gly Lys Ala Arg Ala Trp Val Arg Leu Ser Met Glu Lys Lys Leu Leu  
 225 230 235 240  
 Ser Arg His Leu Lys Gln Leu Leu Ser Asp His Glu Leu Thr Lys Lys  
 245 250 255  
 Leu Tyr Lys Arg Tyr Ala Phe Leu Arg Cys Asp Asp Glu Lys Glu Gln  
 260 265 270  
 Phe Leu Tyr His Leu Leu Ser Phe Asn Ala Val Asp Tyr Phe Cys Phe  
 275 280 285  
 Thr Asn Val Phe Thr Thr Ile Leu Ile Pro Tyr His Ile Leu Ile Val  
 290 295 300  
 Pro Ser Lys Lys Leu Gly Gly Ser Met Phe Thr Ala Asn Pro Trp Ile  
 305 310 315 320  
 Cys Ile Ser Gly Glu Leu Gly Glu Thr Gln Ile Met Gln Ile Pro Arg  
 325 330 335  
 Asn Val Leu Glu Met Thr Phe Glu Cys Gln Asn Leu Gly Lys Leu Thr  
 340 345 350  
 Thr Val Gln Ile Gly His Asp Asn Ser Gly Leu Tyr Ala Lys Trp Leu  
 355 360 365  
 Val Glu Tyr Val Met Val Arg Asn Glu Ile Thr Gly His Thr Tyr Lys  
 370 375 380  
 Phe Pro Cys Gly Arg Trp Leu Gly Lys Gly Met Asp Asp Gly Ser Leu  
 385 390 395 400  
 Glu Arg Ile Leu Val Gly Glu Leu Leu Thr Ser Gln Pro Glu Val Asp  
 405 410 415  
 Glu Arg Pro Cys Arg Thr Pro Pro Leu Gln Gln Ser Pro Ser Val Ile  
 420 425 430  
 Arg Arg Leu Val Thr Ile Ser Pro Asn Asn Lys Pro Lys Leu Asn Thr  
 435 440 445  
 Gly Gln Ile Gln Glu Ser Ile Gly Glu Ala Val Asn Gly Ile Val Lys  
 450 455 460  
 His Phe His Lys Pro Glu Lys Glu Arg Gly Ser Leu Thr Leu Leu Leu  
 465 470 475 480  
 Cys Gly Glu Cys Gly Leu Val Ser Ala Leu Glu Gln Ala Phe Gln His  
 485 490 495  
 Gly Phe Lys Ser Pro Arg Leu Phe Lys Asn Val Phe Ile Trp Asp Phe  
 500 505 510

Leu	Glu	Lys	Ala	Gln	Thr	Tyr	Tyr	Glu	Thr	Leu	Glu	Lys	Asn	Glu	Val		
515				520				525									
Val	Pro	Glu	Glu	Asn	Trp	His	Thr	Arg	Ala	Arg	Asn	Phe	Cys	Arg	Phe		
530				535				540									
Val	Thr	Ala	Ile	Asn	Asn	Thr	Pro	Arg	Asn	Ile	Gly	Lys	Asp	Gly	Lys		
545				550				555				560					
Phe	Gln	Met	Leu	Val	Cys	Leu	Gly	Ala	Arg	Asp	His	Leu	Leu	His	His		
565				570				575									
Trp	Ile	Ala	Leu	Leu	Ala	Asp	Cys	Pro	Ile	Thr	Ala	His	Met	Tyr	Glu		
580				585				590									
Asp	Val	Ala	Leu	Ile	Lys	Asp	His	Thr	Leu	Val	Asn	Ser	Leu	Ile	Arg		
595				600				605									
Val	Leu	Gln	Thr	Leu	Gln	Glu	Phe	Asn	Ile	Thr	Leu	Glu	Thr	Ser	Leu		
610				615				620									
Val	Lys	Gly	Ile	Asp	Ile												
625				630													

&lt;210&gt; 3312

 $\langle 211 \rangle$  100

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3312

Met	Ser	Arg	Leu	Ala	Gly	Gly	Gln	Ala	Pro	Tyr	Leu	Trp	Glu	Gln	Gly
1				5				10					15		
Phe	Ala	Gln	Pro	Pro	Trp	Asp	Ala	Leu	Gly	Leu	Leu	Thr	Ala	Gln	Asp
			20					25					30		
Pro	Ser	Arg	Glu	Ala	Ala	Trp	Ile	Gly	Gly	Ser	Gly	Leu	Thr	Ala	Gly
		35					40					45			
Leu	Gly	Leu	Glu	Pro	Ser	Pro	Cys	Pro	Ala	Gln	Ala	Pro	Ala	Glu	Pro
	50						55				60				
Gly	Ala	Leu	Ala	Glu	Ala	Gly	Leu	Gly	Ser	Gly	Ala	Ala	Arg	Arg	Pro
65				70						75					80
Pro	Ile	Ser	His	Ser	Leu	Gly	Val	Leu	Arg	Val	Thr	Gln	Arg	Thr	Val
			85					90							95

Lys Cys Trp Ile

100

<210> 3313

<211> 635

<212> PRT

<213> Homo sapiens

<400> 3313

Met	Ser	Thr	Cys	Cys	Trp	Cys	Thr	Pro	Gly	Gly	Ala	Ser	Thr	Ile	Asp
1				5					10					15	
Phe	Leu	Lys	Arg	Tyr	Ala	Ser	Asn	Thr	Pro	Ser	Gly	Glu	Phe	Gln	Thr
			20					25					30		
Ala	Asp	Glu	Asp	Leu	Cys	Tyr	Cys	Leu	Glu	Cys	Val	Ala	Glu	Tyr	His
		35					40					45			
Lys	Ala	Arg	Asp	Glu	Leu	Pro	Phe	Leu	His	Glu	Val	Leu	Trp	Glu	Leu
	50					55					60				
Glu	Thr	Leu	Arg	Leu	Ile	Asn	His	Phe	Glu	Lys	Ser	Met	Lys	Ala	Glu
65				70					75					80	
Ile	Gly	Asp	Asp	Asp	Glu	Leu	Tyr	Ile	Val	Asp	Asn	Asn	Gly	Glu	Met
			85						90				95		
Pro	Leu	Phe	Asp	Ile	Thr	Gly	Gln	Asp	Phe	Glu	Asn	Lys	Leu	Arg	Val
		100						105					110		
Pro	Leu	Leu	Glu	Ile	Leu	Lys	Tyr	Pro	Tyr	Leu	Leu	Leu	His	Glu	Arg
		115					120						125		
Val	Asn	Glu	Leu	Cys	Val	Glu	Ala	Leu	Cys	Arg	Met	Glu	Gln	Ala	Asn
	130					135						140			
Cys	Ser	Phe	Gln	Val	Phe	Asp	Lys	His	Pro	Gly	Ile	Tyr	Leu	Phe	Leu
145				150						155				160	
Val	His	Pro	Asn	Glu	Met	Val	Arg	Arg	Trp	Ala	Ile	Leu	Thr	Ala	Arg
			165						170				175		
Asn	Leu	Gly	Lys	Val	Asp	Arg	Asp	Asp	Tyr	Tyr	Asp	Leu	Gln	Glu	Val
		180						185					190		
Leu	Leu	Cys	Leu	Phe	Lys	Val	Ile	Glu	Leu	Gly	Leu	Leu	Glu	Ser	Pro
		195						200					205		

Asp Ile Tyr Thr Ser Ser Val Leu Glu Lys Gly Lys Leu Ile Leu Leu  
 210 215 220  
 Pro Ser His Met Tyr Asp Thr Thr Asn Tyr Lys Ser Tyr Trp Leu Gly  
 225 230 235 240  
 Ile Cys Met Leu Leu Thr Ile Leu Glu Glu Gln Ala Met Asp Ser Leu  
 245 250 255  
 Leu Leu Gly Ser Asp Lys Gln Asn Asp Phe Met Gln Ser Ile Leu His  
 260 265 270  
 Thr Met Glu Arg Glu Ala Asp Asp Asp Ser Val Asp Pro Phe Trp Pro  
 275 280 285  
 Ala Leu His Cys Phe Met Val Ile Leu Asp Arg Leu Gly Ser Lys Val  
 290 295 300  
 Trp Gly Gln Leu Met Asp Pro Ile Val Ala Phe Gln Thr Ile Ile Asn  
 305 310 315 320  
 Asn Ala Ser Tyr Asn Arg Gly Ile Arg His Ile Arg Asn Ser Ser Val  
 325 330 335  
 Arg Thr Lys Leu Glu Pro Glu Ser Tyr Leu Asp Asp Met Val Thr Cys  
 340 345 350  
 Ser Gln Ile Val Tyr Asn Tyr Asn Pro Glu Lys Thr Lys Lys Asp Ser  
 355 360 365  
 Gly Trp Arg Thr Ala Ile Cys Pro Asp Tyr Cys Pro Asn Met Tyr Glu  
 370 375 380  
 Glu Met Glu Thr Leu Ala Ser Val Leu Gln Ser Asp Ile Gly Gln Asp  
 385 390 395 400  
 Met Arg Val His Asn Ser Thr Phe Leu Arg Phe Ile Pro Phe Val Gln  
 405 410 415  
 Ser Leu Met Asp Leu Lys Asp Leu Gly Val Ala Tyr Ile Ala Gln Val  
 420 425 430  
 Val Asn His Leu Tyr Ser Glu Val Lys Glu Val Leu Asn Gln Thr Asp  
 435 440 445  
 Ala Val Cys Asp Lys Val Thr Glu Phe Phe Leu Leu Ile Leu Val Ser  
 450 455 460  
 Val Ile Glu Leu His Arg Asn Lys Lys Cys Leu His Leu Leu Trp Val  
 465 470 475 480  
 Ser Ser Gln Gln Trp Val Glu Ala Val Val Lys Cys Ala Lys Leu Pro  
 485 490 495

Thr Thr Ala Phe Thr Arg Ser Ser Glu Lys Ser Ser Gly Asn Cys Ser  
 500 505 510  
 Lys Gly Thr Ala Met Ile Ser Ser Leu Ser Leu His Ser Met Pro Ser  
 515 520 525  
 Asn Ser Val Gln Leu Ala Tyr Val Gln Leu Ile Arg Ser Leu Leu Lys  
 530 535 540  
 Glu Gly Tyr Gln Leu Gly Gln Gln Ser Leu Cys Lys Arg Phe Trp Asp  
 545 550 555 560  
 Lys Leu Asn Leu Phe Leu Arg Gly Asn Leu Ser Leu Gly Trp Gln Leu  
 565 570 575  
 Thr Ser Gln Glu Thr His Glu Leu Gln Ser Cys Leu Lys Gln Ile Ile  
 580 585 590  
 Arg Asn Ile Lys Phe Lys Ala Pro Pro Cys Asn Thr Phe Val Asp Leu  
 595 600 605  
 Thr Ser Ala Cys Lys Ile Ser Pro Ala Ser Tyr Asn Lys Glu Glu Ser  
 610 615 620  
 Ser Leu Ser Ser Phe Asn Ile Ser Tyr Phe Lys  
 625 630 635

<210> 3314

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3314

Met Gln Gly Lys Cys Phe Ser Arg Thr Ser Leu Leu Ser Lys Gly Thr  
 1 5 10 15  
 Gln Gln Ser Gly Cys Thr Leu Cys Asp Leu Pro Ser Gln His Val Pro  
 20 25 30  
 Pro Leu Ser Pro Arg Arg Glu Arg Gln Glu Arg Val Phe Thr Val Ser  
 35 40 45  
 Val Ser Leu Ser His Gln Ala Gly Val Gln Trp Pro Asp Leu Gly Ser  
 50 55 60  
 Leu His Pro Leu Thr Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Leu  
 65 70 75 80



Pro Arg Ser Trp Asp Ser Arg His Ala Pro Pro Leu Pro Ala Asn Phe  
                     85                    90                    95  
 Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser  
                     100                    105                    110  
 Leu Ser

<210> 3315

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3315

Met Val Leu Asp Lys Arg Ala Gly Lys Lys Arg Ala Ala Arg Gly Gly  
     1                    5                    10                    15  
 Phe Cys Pro Arg Arg Pro Gln Ala Gly Gly Pro His Gly Leu Cys Pro  
                     20                    25                    30  
 Asp Val Leu Leu Leu His Pro Ala Ala Pro Thr Thr Glu Thr Ala Pro  
                     35                    40                    45  
 Gly Glu Gly Thr Thr Leu Ser Thr Gly Gln Pro Val Ser Pro Gly Arg  
                     50                    55                    60  
 Leu Leu Ala His His Ser Trp Gly Pro Glu Glu Ala Pro Ala Gly Gly  
     65                    70                    75                    80  
 Gly Ser Gly Pro Gly Leu Ser Leu Ser Leu His Thr Asp Trp Ser Pro  
                     85                    90                    95  
 Ala Leu Ser Pro Thr Gly Thr Leu Arg Gly Asn Phe Ser Lys Val Leu  
                     100                    105                    110  
 Trp Gly Gln Arg Glu Val Val Glu Pro Ala Arg Leu Trp Glu Ala Pro  
                     115                    120                    125  
 Glu Lys Leu Pro Leu Pro Thr Ser Val Leu Ala Gly Phe Gly Pro Trp  
                     130                    135                    140  
 Ala Gly Pro Pro Gln Ala Pro Lys Gly Lys Val Val Gln Gly Lys Ala  
     145                    150                    155                    160  
 Leu Glu Ala Ala Gly Ile Arg Val Gly His Thr Glu Gly Tyr Gln Val  
                     165                    170                    175

Leu Trp Gly Pro Trp Gly Pro Ala Leu Glu Ala Asp Arg Ser Thr Gly  
                   180                  185                  190  
 Leu Arg Met Ser Cys Cys Pro Arg Thr Trp Trp Ser Gly Pro Gly Arg  
                   195                  200                  205  
 Ala Ala Pro Pro Pro Pro Ile Pro His Leu Val Ile Thr  
                   210                  215                  220

<210> 3316

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3316

Met Gly Cys Ala Arg Arg His Ala Gly Pro Arg Gly Ser Pro Val Lys  
           1                  5                  10                  15  
 Gly Ser Gly Gly Leu Asp Ser Leu Trp Ala Trp Gly Gly Val Val Ser  
                   20                  25                  30  
 Leu Cys Trp Leu Ser Tyr Arg Trp Trp Pro Val Ser Pro Gly Ser Gly  
                   35                  40                  45  
 Cys Ser His Val Pro Ala Pro Thr Leu Pro Ala Arg Asp Arg Pro His  
                   50                  55                  60  
 Gln Asp Pro Gly Ala Ala Pro Ala Ser Ala Arg Leu Ser Pro Arg Ser  
           65                  70                  75                  80  
 Gln Val Arg Pro Gln Pro Leu Arg His Ala Ser Gly Ser Ser Cys Cys  
                   85                  90                  95  
 Thr Cys Ser Ser Pro Cys Ala Ser Thr Leu Leu Ser Gly Phe Leu Pro  
                   100                  105                  110  
 Leu Ala Thr Gly Arg Val Cys Val Lys Pro Gln Gly Leu Gln Lys Leu  
                   115                  120                  125  
 Glu Val Pro Leu Ser Gly Arg Ile Met His Cys Thr Arg Gly Ile Lys  
                   130                  135                  140  
 Gly Gly Asp Arg Lys Asn Tyr Gly Cys Cys Asp Thr Ser Pro Thr Ala  
           145                  150                  155                  160  
 Pro Arg Leu Ala Ala Thr Ala Thr Arg Arg Asp Phe Ser Val Ala Ser  
                   165                  170                  175

Arg Gly Val Gly Gln Arg Trp Ser Leu Val Thr Phe Ser Leu Gly Pro  
                   180                  185                  190  
 Ala Pro Gly Leu Ser Ser Leu Gly Asn Ser Thr Ser Leu Ser Thr Pro  
                   195                  200                  205  
 Leu Glu Gly Leu Thr Met Arg Gly Ala Gln Thr Gly Gly Ile Thr Thr  
                   210                  215                  220  
 Trp Phe Gly Leu Tyr His Ser Pro Arg Asp Lys Ala Arg Gln Thr Pro  
 225                  230                  235                  240  
 Leu His Ile Arg Ser Glu Phe Glu Leu Trp Leu His Asp Thr Asp Thr  
                   245                  250                  255

<210> 3317

<211> 639

<212> PRT

<213> Homo sapiens

<400> 3317

Met Gly Pro Gln Gly Ala Arg Arg Gln Ala Phe Leu Ala Phe Gly Asp  
   1                  5                  10                  15  
 Val Thr Val Asp Phe Thr Gln Lys Glu Trp Arg Leu Leu Ser Pro Ala  
                   20                  25                  30  
 Gln Arg Ala Leu Tyr Arg Glu Val Thr Leu Glu Asn Tyr Ser His Leu  
                   35                  40                  45  
 Val Ser Leu Gly Ile Leu His Ser Lys Pro Glu Leu Ile Arg Arg Leu  
                   50                  55                  60  
 Glu Gln Gly Glu Val Pro Trp Gly Glu Glu Arg Arg Arg Pro Gly  
                   65                  70                  75                  80  
 Pro Cys Ala Gly Ile Tyr Ala Glu His Val Leu Arg Pro Lys Asn Leu  
                   85                  90                  95  
 Gly Leu Ala His Gln Arg Gln Gln Gln Leu Gln Phe Ser Asp Gln Ser  
                   100                  105                  110  
 Phe Gln Ser Asp Thr Ala Glu Gly Gln Glu Lys Glu Lys Ser Thr Lys  
                   115                  120                  125  
 Pro Met Ala Phe Ser Ser Pro Pro Leu Arg His Ala Val Ser Ser Arg  
                   130                  135                  140

Arg Arg Asn Ser Val Val Glu Ile Glu Ser Ser Gln Gly Gln Arg Glu  
 145 150 155 160  
 Asn Pro Thr Glu Ile Asp Lys Val Leu Lys Gly Ile Glu Asn Ser Arg  
 165 170 175  
 Trp Gly Ala Phe Lys Cys Ala Glu Arg Gly Gln Asp Phe Ser Arg Lys  
 180 185 190  
 Met Met Val Ile Ile His Lys Lys Ala His Ser Arg Gln Lys Leu Phe  
 195 200 205  
 Thr Cys Arg Glu Cys His Gln Gly Phe Arg Asp Glu Ser Ala Leu Leu  
 210 215 220  
 Leu His Gln Asn Thr His Thr Gly Glu Lys Ser Tyr Val Cys Ser Val  
 225 230 235 240  
 Cys Gly Arg Gly Phe Ser Leu Lys Ala Asn Leu Leu Arg His Gln Arg  
 245 250 255  
 Thr His Ser Gly Glu Lys Pro Phe Leu Cys Lys Val Cys Gly Arg Gly  
 260 265 270  
 Tyr Thr Ser Lys Ser Tyr Leu Thr Val His Glu Arg Thr His Thr Gly  
 275 280 285  
 Glu Lys Pro Tyr Glu Cys Gln Glu Cys Gly Arg Arg Phe Asn Asp Lys  
 290 295 300  
 Ser Ser Tyr Asn Lys His Leu Lys Ala His Ser Gly Glu Lys Pro Phe  
 305 310 315 320  
 Val Cys Lys Glu Cys Gly Arg Gly Tyr Thr Asn Lys Ser Tyr Phe Val  
 325 330 335  
 Val His Lys Arg Ile His Ser Gly Glu Lys Pro Tyr Arg Cys Gln Glu  
 340 345 350  
 Cys Gly Arg Gly Phe Ser Asn Lys Ser His Leu Ile Thr His Gln Arg  
 355 360 365  
 Thr His Ser Gly Glu Lys Pro Phe Ala Cys Arg Gln Cys Lys Gln Ser  
 370 375 380  
 Phe Ser Val Lys Gly Ser Leu Leu Arg His Gln Arg Thr His Ser Gly  
 385 390 395 400  
 Glu Lys Pro Phe Val Cys Lys Asp Cys Glu Arg Ser Phe Ser Gln Lys  
 405 410 415  
 Ser Thr Leu Val Tyr His Gln Arg Thr His Ser Gly Glu Lys Pro Phe  
 420 425 430

Val Cys Arg Glu Cys Gly Gln Gly Phe Ile Gln Lys Ser Thr Leu Val  
 435 440 445  
 Lys His Gln Ile Thr His Ser Glu Glu Lys Pro Phe Val Cys Lys Asp  
 450 455 460  
 Cys Gly Arg Gly Phe Ile Gln Lys Ser Thr Phe Thr Leu His Gln Arg  
 465 470 475 480  
 Thr His Ser Glu Glu Lys Pro Tyr Gly Cys Arg Glu Cys Gly Arg Arg  
 485 490 495  
 Phe Arg Asp Lys Ser Ser Tyr Asn Lys His Leu Arg Ala His Leu Gly  
 500 505 510  
 Glu Lys Arg Phe Phe Cys Arg Asp Cys Gly Arg Gly Phe Thr Leu Lys  
 515 520 525  
 Pro Asn Leu Thr Ile His Gln Arg Thr His Ser Gly Glu Lys Pro Phe  
 530 535 540  
 Val Cys Asn Val Cys Gly Gln Gly Phe Ser Trp Lys Arg Ser Leu Thr  
 545 550 555 560  
 Arg His His Trp Arg Ile His Ser Lys Glu Lys Pro Phe Val Cys Gln  
 565 570 575  
 Glu Cys Lys Arg Gly Tyr Thr Ser Lys Ser Asp Leu Thr Val His Glu  
 580 585 590  
 Arg Ile His Thr Gly Glu Arg Pro Tyr Glu Cys Gln Glu Cys Gly Arg  
 595 600 605  
 Lys Phe Ser Asn Lys Ser Tyr Tyr Ser Lys His Leu Lys Arg His Leu  
 610 615 620  
 Arg Glu Lys Arg Phe Cys Thr Gly Ser Val Gly Glu Ala Ser Ser  
 625 630 635

<210> 3318

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3318

Met Thr Ser Trp Ile Pro Leu Met Pro Gly Asp Ser Ala Asp Leu Phe  
 1 5 10 15

Gly Asp Gly Thr Thr Glu Asp Gly Ser Ala Ala Asn Gly Arg Leu Trp  
                   20                                  25                                  30  
 Arg Thr Val Ile Ile Gly Glu Gln Glu His Arg Ile Asp Leu His Met  
                   35                                  40                                  45  
 Ile Arg Pro Tyr Met Lys Val Val Thr His Gly Gly Tyr Tyr Gly Glu  
                   50                                  55                                  60  
 Gly Leu Asn Ala Ile Ile Val Phe Ala Ala Cys Phe Leu Pro Asp Ser  
                   65                                  70                                  75                                  80  
 Ser Leu Pro Asp Tyr His Tyr Ile Met Glu Asn Leu Phe Leu Tyr Val  
                                   85                                  90                                  95  
 Ile Ser Ser Leu Glu Leu Leu Val Ala Glu Asp Tyr Met Ile Val Tyr  
                                   100                                  105                                  110  
 Leu Asn Gly Ala Thr Pro Arg Arg Arg Met Pro Gly Ile Gly Trp Leu  
                                   115                                  120                                  125  
 Lys Lys Cys Tyr Gln Met Ile Gly Arg Arg Leu Arg Lys Asn Leu Lys  
                                   130                                  135                                  140  
 Ser Leu Ile Ile Val His Pro Ser Trp Phe Ile Arg Thr Val Leu Ala  
                                   145                                  150                                  155                                  160  
 Ile Ser Arg Pro Phe Ile Ser Val Lys Phe Ile Asn Lys Ile Gln Tyr  
                                   165                                  170                                  175  
 Val His Ser Leu Glu Asp Leu Glu Gln Leu Ile Pro Met Glu His Val  
                                   180                                  185                                  190  
 Gln Ile Pro Asp Cys Val Leu Gln Tyr Glu Glu Glu Arg Leu Lys Ala  
                                   195                                  200                                  205  
 Arg Arg Glu Ser Ala Arg Pro Gln Pro Glu Phe Val Leu Pro Arg Ser  
                                   210                                  215                                  220  
 Glu Glu Lys Pro Glu Val Ala Pro Val Glu Asn Arg Ser Ala Leu Val  
                                   225                                  230                                  235                                  240  
 Ser Glu Asp Gln Glu Thr Ser Met Ser  
                                   245

<210> 3319

<211> 959

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3319

Met Ala Pro Tyr Gln Gly Pro Ala Leu Tyr Val Tyr Asn Asn Ala Val  
 1 5 10 15  
 Phe Thr Pro Glu Asp Trp His Gly Ile Gln Glu Ile Ala Arg Ser Arg  
 20 25 30  
 Lys Lys Asp Asp Pro Leu Lys Val Gly Arg Phe Gly Ile Gly Phe Asn  
 35 40 45  
 Ser Val Tyr His Ile Thr Asp Val Pro Cys Ile Phe Ser Gly Asp Gln  
 50 55 60  
 Ile Gly Met Leu Asp Pro His Gln Thr Leu Phe Gly Pro His Glu Ser  
 65 70 75 80  
 Gly Gln Cys Trp Asn Leu Lys Asp Asp Ser Lys Glu Ile Ser Glu Leu  
 85 90 95  
 Ser Asp Gln Phe Ala Pro Phe Val Gly Ile Phe Gly Ser Thr Lys Glu  
 100 105 110  
 Thr Phe Ile Asn Gly Asn Phe Pro Gly Thr Phe Phe Arg Phe Pro Leu  
 115 120 125  
 Arg Leu Gln Pro Ser Gln Leu Ser Ser Asn Leu Tyr Asn Lys Gln Lys  
 130 135 140  
 Val Leu Glu Leu Phe Glu Ser Phe Arg Ala Asp Ala Asp Thr Val Leu  
 145 150 155 160  
 Leu Phe Leu Lys Ser Val Gln Asp Val Ser Leu Tyr Val Arg Glu Ala  
 165 170 175  
 Asp Gly Thr Glu Lys Leu Val Phe Arg Val Thr Ser Ser Glu Ser Lys  
 180 185 190  
 Ala Leu Lys His Glu Arg Pro Asn Ser Ile Lys Ile Leu Gly Thr Ala  
 195 200 205  
 Ile Ser Asn Tyr Cys Lys Lys Thr Pro Ser Asn Asn Ile Thr Cys Val  
 210 215 220  
 Thr Tyr His Val Asn Ile Val Leu Glu Glu Glu Ser Thr Lys Asp Ala  
 225 230 235 240  
 Gln Lys Thr Ser Trp Leu Val Cys Asn Ser Val Gly Gly Arg Gly Ile  
 245 250 255  
 Ser Ser Lys Leu Asp Ser Leu Ala Asp Glu Leu Lys Phe Val Pro Ile  
 260 265 270

Ile Gly Ile Ala Met Pro Leu Ser Ser Arg Asp Asp Glu Ala Lys Gly  
 275 280 285  
 Ala Thr Ser Asp Phe Ser Gly Lys Ala Phe Cys Phe Leu Pro Leu Pro  
 290 295 300  
 Pro Gly Glu Glu Ser Ser Thr Gly Leu Pro Val His Ile Ser Gly Phe  
 305 310 315 320  
 Phe Gly Leu Thr Asp Asn Arg Arg Ser Ile Lys Trp Arg Glu Leu Asp  
 325 330 335  
 Gln Trp Arg Asp Pro Ala Ala Leu Trp Asn Glu Phe Leu Val Met Asn  
 340 345 350  
 Val Val Pro Lys Ala Tyr Ala Thr Leu Ile Leu Asp Ser Ile Lys Arg  
 355 360 365  
 Leu Glu Met Glu Lys Ser Ser Asp Phe Pro Leu Ser Val Asp Val Ile  
 370 375 380  
 Tyr Lys Leu Trp Pro Glu Ala Ser Lys Val Lys Val His Trp Gln Pro  
 385 390 395 400  
 Val Leu Glu Pro Leu Phe Ser Glu Leu Leu Gln Asn Ala Val Ile Tyr  
 405 410 415  
 Ser Ile Ser Cys Asp Trp Val Arg Leu Glu Gln Val Tyr Phe Ser Glu  
 420 425 430  
 Leu Asp Glu Asn Leu Glu Tyr Thr Lys Thr Val Leu Asn Tyr Leu Gln  
 435 440 445  
 Ser Ser Gly Lys Gln Ile Ala Lys Val Pro Gly Asn Val Asp Ala Ala  
 450 455 460  
 Val Gln Leu Thr Ala Ala Ser Gly Thr Thr Pro Val Arg Lys Val Thr  
 465 470 475 480  
 Pro Ala Trp Val Arg Gln Val Leu Arg Lys Cys Ala His Leu Gly Cys  
 485 490 495  
 Ala Glu Glu Lys Leu His Leu Leu Glu Phe Val Leu Ser Asp Gln Ala  
 500 505 510  
 Tyr Ser Glu Leu Leu Gly Leu Glu Leu Leu Pro Leu Gln Asn Gly Asn  
 515 520 525  
 Phe Val Pro Phe Ser Ser Ser Val Ser Asp Gln Asp Val Ile Tyr Ile  
 530 535 540  
 Thr Ser Ala Glu Tyr Pro Arg Ser Leu Phe Pro Ser Leu Glu Gly Arg  
 545 550 555 560



Phe Ile Leu Asp Asn Leu Lys Pro His Leu Val Ala Ala Leu Lys Glu  
 565 570 575  
 Ala Ala Gln Thr Arg Gly Arg Pro Cys Thr Gln Leu Gln Leu Leu Asn  
 580 585 590  
 Pro Glu Arg Phe Ala Arg Leu Ile Lys Glu Val Met Asn Thr Phe Trp  
 595 600 605  
 Pro Gly Arg Glu Leu Ile Val Gln Trp Tyr Pro Phe Asp Glu Asn Arg  
 610 615 620  
 Asn His Pro Ser Val Ser Trp Leu Lys Met Val Trp Lys Asn Leu Tyr  
 625 630 635 640  
 Ile His Phe Ser Glu Asp Leu Thr Leu Phe Asp Glu Met Pro Leu Ile  
 645 650 655  
 Pro Arg Thr Ile Leu Glu Glu Gly Gln Thr Cys Val Glu Leu Ile Arg  
 660 665 670  
 Leu Arg Ile Pro Ser Leu Val Ile Leu Asp Asp Glu Ser Glu Ala Gln  
 675 680 685  
 Leu Pro Glu Phe Leu Ala Asp Ile Val Gln Lys Leu Gly Gly Phe Val  
 690 695 700  
 Leu Lys Lys Leu Asp Ala Ser Ile Gln His Pro Leu Ile Lys Lys Tyr  
 705 710 715 720  
 Ile His Ser Pro Leu Pro Ser Ala Val Leu Gln Ile Met Glu Lys Met  
 725 730 735  
 Pro Leu Gln Lys Leu Cys Asn Gln Ile Thr Ser Leu Leu Pro Thr His  
 740 745 750  
 Lys Asp Ala Leu Arg Lys Phe Leu Ala Ser Leu Thr Asp Ser Ser Glu  
 755 760 765  
 Lys Glu Lys Arg Ile Ile Gln Glu Leu Ala Ile Phe Lys Arg Ile Asn  
 770 775 780  
 His Ser Ser Asp Gln Gly Ile Ser Ser Tyr Thr Lys Leu Lys Gly Cys  
 785 790 795 800  
 Lys Val Leu His His Thr Ala Lys Leu Pro Ala Asp Leu Arg Leu Ser  
 805 810 815  
 Ile Ser Val Ile Asp Ser Ser Asp Glu Ala Thr Ile Arg Leu Ala Asn  
 820 825 830  
 Met Leu Lys Ile Glu Gln Leu Lys Thr Thr Ser Cys Leu Lys Leu Val  
 835 840 845

Leu Lys Asp Ile Glu Asn Ala Phe Tyr Ser His Glu Glu Val Thr Gln  
 850 855 860  
 Leu Met Leu Trp Val Leu Glu Asn Leu Ser Ser Leu Lys Asn Glu Asn  
 865 870 875 880  
 Pro Asn Val Leu Glu Trp Leu Thr Pro Leu Lys Phe Ile Gln Ile Ser  
 885 890 895  
 Gln Glu Gln Met Val Ser Ala Gly Glu Leu Phe Asp Pro Asp Ile Glu  
 900 905 910  
 Val Leu Lys Asp Leu Phe Cys Asn Glu Glu Gly Thr Tyr Phe Pro Pro  
 915 920 925  
 Ser Val Phe Thr Ser Pro Asp Ile Leu His Ser Leu Arg Gln Ile Gly  
 930 935 940  
 Leu Lys Asn Glu Ala Ser Leu Lys Glu Lys Asp Val Val Gln Val  
 945 950 955

<210> 3320

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3320

Met Gly Ser Ala Leu Gly Thr Ala Gly Ser Trp Ala Gln Lys Gly Gly  
 1 5 10 15  
 Thr Lys Val Cys Val Gln His Gln Glu Gln Gln Ala Ala Gly His Lys  
 20 25 30  
 Arg Glu Val Leu Gly Met Trp Val Gln His Gln Gly Gln Arg Ser Thr  
 35 40 45  
 Lys Gly Lys Arg Cys Gly Tyr Glu Phe Ser Thr Lys Asp Ser Gly Gln  
 50 55 60  
 Leu Ile Leu Ala Gly Val Leu Gly Met His Phe Arg His Glu Tyr Gln  
 65 70 75 80  
 Leu Pro Arg Pro Gly Thr Val Val His Ala Leu Ile Pro Ala Leu Trp  
 85 90 95  
 Glu Ala Lys Ala Asp Gly Ser Arg Gly Gln Gln Phe Glu Thr Ser Leu  
 100 105 110

Ala Asn Ile Val Lys Leu Cys Leu Tyr

115

120

<210> 3321

<211> 1268

<212> PRT

<213> Homo sapiens

<400> 3321

Met Arg Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr

1

5

10

15

Ser Thr Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu

20

25

30

Gln Leu Asp Leu Leu Phe Glu Lys Glu Gln Gly Ala Val Arg Lys Ala

35

40

45

Gly Trp Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys

50

55

60

Leu Glu Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu

65

70

75

80

Lys Gly Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met

85

90

95

Asp Gln Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser Ile

100

105

110

Val Gln Ser Val Pro Glu His Pro Lys Lys Glu Asn Val Phe Cys Leu

115

120

125

Ser Asn Ser Phe Gly Asp Val Tyr Leu Phe Gln Ala Thr Ser Gln Thr

130

135

140

Asp Leu Glu Asn Trp Val Thr Ala Val His Ser Ala Cys Ala Ser Leu

145

150

155

160

Phe Ala Lys Lys His Gly Lys Glu Asp Thr Leu Arg Leu Leu Lys Asn

165

170

175

Gln Thr Lys Asn Leu Leu Gln Lys Ile Asp Met Asp Ser Lys Met Lys

180

185

190

Lys Met Ala Glu Leu Gln Leu Ser Val Val Ser Asp Pro Lys Asn Arg

195

200

205

Lys Ala Ile Glu Asn Gln Ile Gln Gln Trp Glu Gln Asn Leu Glu Lys  
 210 215 220  
  
 Phe His Met Asp Leu Phe Arg Met Arg Cys Tyr Leu Ala Ser Leu Gln  
 225 230 235 240  
 Gly Gly Glu Leu Pro Asn Pro Lys Ser Leu Leu Ala Ala Ala Ser Arg  
 245 250 255  
 Pro Ser Lys Leu Ala Leu Gly Arg Leu Gly Ile Leu Ser Val Ser Ser  
 260 265 270  
 Phe His Ala Leu Val Cys Ser Arg Asp Asp Ser Ala Leu Arg Lys Arg  
 275 280 285  
 Thr Leu Ser Leu Thr Gln Arg Gly Arg Asn Lys Lys Gly Ile Phe Ser  
 290 295 300  
 Ser Leu Lys Gly Leu Asp Thr Leu Ala Arg Lys Gly Lys Glu Lys Arg  
 305 310 315 320  
 Pro Ser Ile Thr Gln Val Asp Glu Leu Leu His Ile Tyr Gly Ser Thr  
 325 330 335  
 Val Asp Gly Val Pro Arg Asp Asn Ala Trp Glu Ile Gln Thr Tyr Val  
 340 345 350  
 His Phe Gln Asp Asn His Gly Val Thr Val Gly Ile Lys Pro Glu His  
 355 360 365  
 Arg Val Glu Asp Ile Leu Thr Leu Ala Cys Lys Met Arg Gln Leu Glu  
 370 375 380  
 Pro Ser His Tyr Gly Leu Gln Leu Arg Lys Leu Val Asp Asp Asn Val  
 385 390 395 400  
 Glu Tyr Cys Ile Pro Ala Pro Tyr Glu Tyr Met Gln Gln Gln Val Tyr  
 405 410 415  
 Asp Glu Ile Glu Val Phe Pro Leu Asn Val Tyr Asp Val Gln Leu Thr  
 420 425 430  
 Lys Thr Gly Ser Val Cys Asp Phe Gly Phe Ala Val Thr Ala Gln Val  
 435 440 445  
 Asp Glu Arg Gln His Leu Ser Arg Ile Phe Ile Ser Asp Val Leu Pro  
 450 455 460  
 Asp Gly Leu Ala Tyr Gly Glu Gly Leu Arg Lys Gly Asn Glu Ile Met  
 465 470 475 480  
 Thr Leu Asn Gly Glu Ala Val Ser Asp Leu Asp Leu Lys Gln Met Glu

485	490	495
Ala Leu Phe Ser Glu Lys Ser Val Gly Leu Thr Leu Ile Ala Arg Pro		
500	505	510
Pro Asp Thr Lys Ala Thr Leu Cys Thr Ser Trp Ser Asp Ser Asp Leu		
515	520	525
Phe Ser Arg Asp Gln Lys Ser Leu Leu Pro Pro Pro Asn Gln Ser Gln		
530	535	540
Leu Leu Glu Glu Phe Leu Asp Asn Phe Lys Lys Asn Thr Ala Asn Asp		
545	550	555
Phe Ser Asn Val Pro Asp Ile Thr Thr Gly Leu Lys Arg Ser Gln Thr		
565	570	575
Asp Gly Thr Leu Asp Gln Val Ser His Arg Glu Lys Met Glu Gln Thr		
580	585	590
Phe Arg Ser Ala Glu Gln Ile Thr Ala Leu Cys Lys Ser Phe Asn Asp		
595	600	605
Ser Gln Ala Asn Gly Met Glu Gly Pro Arg Glu Asn Gln Asp Pro Pro		
610	615	620
Pro Arg Pro Leu Ala Arg His Leu Ser Asp Ala Asp Arg Leu Arg Lys		
625	630	635
Val Ile Gln Glu Leu Val Asp Thr Glu Lys Ser Tyr Val Lys Asp Leu		
645	650	655
Ser Cys Leu Phe Glu Leu Tyr Leu Glu Pro Leu Gln Asn Glu Thr Phe		
660	665	670
Leu Thr Gln Asp Glu Met Glu Ser Leu Phe Gly Ser Leu Pro Glu Met		
675	680	685
Leu Glu Phe Gln Lys Val Phe Leu Glu Thr Leu Glu Asp Gly Ile Ser		
690	695	700
Ala Ser Ser Asp Phe Asn Thr Leu Glu Thr Pro Ser Gln Phe Arg Lys		
705	710	715
Leu Leu Phe Pro Leu Gly Gly Ser Phe Leu Tyr Tyr Ala Asp His Phe		
725	730	735
Lys Leu Tyr Ser Gly Phe Cys Ala Asn His Ile Lys Val Gln Lys Val		
740	745	750
Leu Glu Arg Ala Lys Thr Asp Lys Ala Phe Lys Ala Phe Leu Asp Ala		
755	760	765
Arg Asn Pro Thr Lys Gln His Ser Ser Thr Leu Glu Ser Tyr Leu Ile		

770	775	780	
Lys Pro Val Gln Arg Val Leu Lys Tyr Pro Leu Leu Leu Lys Glu Leu			
785	790	795	800
Val Ser Leu Thr Asp Gln Glu Ser Glu Glu His Tyr His Leu Thr Glu			
805	810	815	
Ala Leu Lys Ala Met Glu Lys Val Ala Ser His Ile Asn Glu Met Gln			
820	825	830	
Lys Ile Tyr Glu Asp Tyr Gly Thr Val Phe Asp Arg Leu Val Ala Glu			
835	840	845	
Gln Ser Gly Thr Glu Lys Glu Gln Pro Glu Trp Ser Ser Glu Val Met			
850	855	860	
Asp Val Leu Asp Pro Arg Gly Lys Leu Thr Lys Gly Thr Leu Glu Glu			
865	870	875	880
Pro Arg Thr Leu Val Thr Glu Leu Ser Met Gly Glu Leu Leu Met His			
885	890	895	
Ser Thr Val Ser Trp Leu Asn Pro Phe Leu Ser Leu Gly Lys Ala Arg			
900	905	910	
Lys Asp Leu Glu Leu Thr Val Phe Val Phe Lys Arg Ala Val Ile Leu			
915	920	925	
Val Tyr Lys Lys Asn Cys Lys Leu Lys Lys Lys Leu Pro Ser Asn Ser			
930	935	940	
Arg Pro Ala His Asn Ser Thr Asp Leu Asp Pro Phe Lys Phe Arg Trp			
945	950	955	960
Leu Ile Pro Ile Ser Ala Leu Gln Val Arg Leu Gly Asn Pro Ala Gly			
965	970	975	
Thr Glu Asn Asn Ser Ile Trp Glu Leu Ile His Thr Lys Ser Glu Ile			
980	985	990	
Glu Gly Arg Pro Glu Thr Ile Phe Gln Leu Cys Cys Ser Asp Ser Glu			
995	1000	1005	
Ser Lys Thr Asn Ile Val Lys Val Ile Arg Ser Ile Leu Arg Glu Asn			
1010	1015	1020	
Phe Arg Arg His Ile Lys Cys Glu Leu Pro Leu Glu Lys Thr Cys Lys			
1025	1030	1035	1040
Asp Arg Leu Val Pro Leu Lys Asn Arg Val Pro Val Ser Ala Lys Leu			
1045	1050	1055	
Ala Ser Ser Arg Ser Leu Lys Val Leu Lys Asn Ser Ser Ser Asn Glu			

1060	1065	1070
Trp Thr Gly Glu Thr Gly Lys Gly Thr Leu Leu Asp Ser Tyr Glu Gly		
1075	1080	1085
Ser Leu Ser Ser Gly Thr Gln Ser Ser Gly Cys Pro Thr Ala Glu Gly		
1090	1095	1100
Arg Gln Asp Ser Lys Ser Thr Ser Pro Gly Lys Tyr Pro His Pro Gly		
1105	1110	1115
Leu Ala Asp Phe Ala Asp Asn Leu Ile Lys Glu Ser Asp Ile Leu Ser		
1125	1130	1135
Asp Glu Asp Asp Asp His Arg Gln Thr Val Lys Gln Gly Ser Pro Thr		
1140	1145	1150
Lys Asp Ile Glu Ile Gln Phe Gln Arg Leu Arg Ile Ser Glu Asp Pro		
1155	1160	1165
Asp Val His Pro Glu Ala Glu Gln Gln Pro Gly Pro Glu Ser Gly Glu		
1170	1175	1180
Gly Gln Lys Gly Gly Glu Gln Pro Lys Leu Val Arg Gly His Phe Cys		
1185	1190	1195
Pro Ile Lys Arg Lys Thr Asn Ser Thr Lys Arg Asp Arg Gly Thr Leu		
1205	1210	1215
Leu Lys Ala Gln Ile Arg His Gln Ser Leu Asp Ser Gln Ser Glu Asn		
1220	1225	1230
Ala Thr Ile Asp Leu Asn Ser Val Leu Glu Arg Glu Phe Ser Val Gln		
1235	1240	1245
Ser Leu Thr Ser Val Val Ser Glu Glu Cys Phe Tyr Glu Thr Glu Ser		
1250	1255	1260
His Gly Lys Ser		
1265		

&lt;210&gt; 3322

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3322

Met Glu Glu Asn Val Phe Trp Glu Cys Lys Ala Asn Gly Arg Pro Lys

1	5	10	15
Pro Thr Tyr Lys Trp Leu Lys Asn Gly Glu Pro Leu Leu Thr Arg Asp			
20	25	30	
Arg Ile Gln Ile Glu Gln Gly Thr Leu Asn Ile Thr Ile Val Asn Leu			
35	40	45	
Ser Asp Ala Gly Met Tyr Gln Cys Leu Ala Glu Asn Lys His Gly Val			
50	55	60	
Ile Phe Ser Asn Ala Glu Leu Ser Val Ile Ala Val Gly Pro Asp Phe			
65	70	75	80
Ser Arg Thr Leu Leu Lys Arg Val Thr Leu Val Lys Val Gly Gly Glu			
85	90	95	
Val Val Ile Glu Cys Lys Pro Lys Ala Ser Pro Lys Pro Val Tyr Thr			
100	105	110	
Trp Lys Lys Gly Arg Asp Ile Leu Lys Glu Asn Glu Arg Ile Thr Ile			
115	120	125	
Ser Glu Asp Gly Asn Leu Arg Ile Ile Asn Val Thr Lys Ser Asp Ala			
130	135	140	
Gly Ser Tyr Thr Cys Ile Ala Thr Asn His Phe Gly Thr Ala Ser Ser			
145	150	155	160
Thr Gly Asn Leu Val Val Lys Asp Pro Thr Arg Val Met Val Pro Pro			
165	170	175	
Ser Ser Met Asp Val Thr Val Gly Glu Ser Ile Val Leu Pro Cys Gln			
180	185	190	
Val Thr His Asp His Ser Leu Asp Ile Val Phe Thr Trp Ser Phe Asn			
195	200	205	
Gly His Leu Ile Asp Phe Asp Arg Asp Gly Asp His Phe Glu Arg Val			
210	215	220	
Gly Gly Asp Ser Ala Gly Asp Leu Met Ile Arg Asn Ile Gln Leu Lys			
225	230	235	240
His Ala Gly Lys Tyr Val Cys Met Val Gln Thr Ser Val Asp Arg Leu			
245	250	255	
Ser Ala Ala Ala Asp Leu Ile Val Arg Gly Pro Pro Gly Pro Pro Glu			
260	265	270	
Ala Val Thr Ile Asp Glu Ile Thr Asp Thr Thr Ala Gln Leu Ser Trp			
275	280	285	
Arg Pro Gly Pro Asp Asn His Ser Pro Ile Thr Met Tyr Val Ile Gln			



290	295	300	
Ala Arg Thr Pro Phe Ser Val Gly Trp Gln Ala Val Ser Thr Val Pro			
305	310	315	320
Glu Leu Ile Asp Gly Lys Thr Phe Thr Ala Thr Val Val Gly Leu Asn			
	325	330	335
Pro Trp Val Glu Tyr Glu Phe Arg Thr Val Ala Ala Asn Val Ile Gly			
	340	345	350
Ile Gly Glu Pro Ser Arg Pro Ser Glu Lys Arg Arg Thr Glu Glu Ala			
	355	360	365
Leu Pro Glu Val Thr Pro Ala Asn Val Ser Gly Gly Gly Gly Ser Lys			
	370	375	380
Ser Glu Leu Val Ile Thr Trp Glu Thr Val Pro Glu Glu Leu Gln Asn			
385	390	395	400
Gly Arg Gly Phe Gly Tyr Val Val Ala Phe Arg Pro Tyr Gly Lys Met			
	405	410	415
Ile Trp Met Leu Thr Val Leu Ala Ser Ala Asp Ala Ser Arg Tyr Val			
	420	425	430
Phe Arg Asn Glu Ser Val His Pro Phe Ser Pro Phe Glu Val Lys Val			
	435	440	445
Gly Val Phe Asn Asn Lys Gly Glu Gly Pro Phe Ser Pro Thr Thr Val			
	450	455	460
Val Tyr Ser Ala Glu Glu Glu Pro Thr Lys Pro Pro Ala Ser Ile Phe			
465	470	475	480
Ala Arg Ser Leu Ser Ala Thr Asp Ile Glu Val Phe Trp Ala Ser Pro			
	485	490	495
Leu Glu Lys Asn Arg Gly Arg Ile Gln Gly Tyr Glu Val Lys Tyr Trp			
	500	505	510
Arg His			

&lt;210&gt; 3323

&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3323

Met Leu Gly Lys Arg Phe Pro Asn Ile Lys Val Ile Glu Ser Gly Val  
 1 5 10 15  
 Lys Gln Leu Lys Ser Glu Glu His Cys Ile Val Thr Glu Asp Gly Asn  
 20 25 30  
 Gln His Val Tyr Lys Lys Leu Cys Leu Cys Ala Gly Ala Lys Pro Lys  
 35 40 45  
 Leu Ile Cys Glu Gly Asn Pro Tyr Val Leu Gly Ile Arg Asp Thr Asp  
 50 55 60  
 Ser Ala Gln Glu Phe Gln Lys Gln Leu Thr Lys Ala Lys Arg Ile Met  
 65 70 75 80  
 Ile Ile Gly Asn Gly Gly Ile Ala Leu Glu Leu Val Tyr Glu Ile Glu  
 85 90 95  
 Gly Cys Glu Val Ile Trp Ala Ile Lys Asp Lys Ala Ile Gly Asn Thr  
 100 105 110  
 Phe Phe Asp Ala Gly Ala Ala Glu Phe Leu Thr Ser Lys Leu Ile Ala  
 115 120 125  
 Glu Lys Ser Glu Ala Lys Ile Ala His Lys Arg Thr Arg Tyr Thr Thr  
 130 135 140  
 Glu Gly Arg Lys Lys Glu Ala Arg Ser Lys Ser Lys Ala Asp Asn Val  
 145 150 155 160  
 Gly Ser Ala Leu Gly Pro Asp Trp His Glu Gly Leu Asn Leu Lys Gly  
 165 170 175  
 Thr Lys Glu Phe Ser His Lys Ile His Leu Glu Thr Met Cys Glu Val  
 180 185 190  
 Lys Lys Ile Tyr Leu Gln Asp Glu Phe Arg Ile Leu Lys Lys Lys Ser  
 195 200 205  
 Phe Thr Phe Pro Arg Asp His Lys Ser Val Thr Ala Asp Thr Glu Met  
 210 215 220  
 Trp Pro Val Tyr Val Glu Leu Thr Asn Glu Lys Ile Tyr Gly Cys Asp  
 225 230 235 240  
 Phe Ile Val Ser Ala Thr Gly Val Thr Pro Asn Val Glu Pro Phe Leu  
 245 250 255  
 His Gly Asn Ser Phe Asp Leu Gly Glu Asp Gly Gly Leu Lys Val Asp  
 260 265 270  
 Asp His Met His Thr Ser Leu Pro Asp Ile Tyr Ala Ala Gly Asp Ile

275	280	285
Cys Thr Thr Ser Trp Gln Leu Ser Pro Val Trp Gln Gln Met Arg Leu		
290	295	300
Trp Thr Gln Ala Arg Gln Met Gly Trp Tyr Ala Ala Lys Cys Met Ala		
305	310	315
Ala Ala Ser Ser Gly Asp Ser Ile Asp Met Asp Phe Ser Phe Glu Leu		
325	330	335
Phe Ala His Val Thr Lys Phe Phe Asn Tyr Lys Val Val Leu Leu Gly		
340	345	350
Lys Tyr Asn Ala Gln Gly Leu Gly Ser Asp His Glu Leu Met Leu Arg		
355	360	365
Cys Thr Lys Gly Arg Glu Tyr Ile Lys Val Val Met Gln Asn Gly Arg		
370	375	380
Met Met Gly Ala Val Leu Ile Gly Glu Thr Asp Leu Glu Glu Thr Phe		
385	390	395
Glu Asn Leu Ile Leu Asn Gln Met Asn Leu Ser Ser Tyr Gly Glu Asp		
405	410	415
Leu Leu Asp Pro Asn Ile Asp Ile Glu Asp Tyr Phe Asp		
420	425	

&lt;210&gt; 3324

&lt;211&gt; 1130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3324

Met Gly Lys Val Gly Ala Gly Gly Gly Ser Gln Ala Arg Leu Ser Ala		
1	5	10
Leu Leu Ala Gly Ala Gly Leu Leu Ile Leu Cys Ala Pro Gly Val Cys		
20	25	30
Gly Gly Gly Ser Cys Cys Pro Ser Pro His Pro Ser Ser Ala Pro Arg		
35	40	45
Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg		
50	55	60
Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val		

65	70	75	80
Ala Pro Gly Asp Arg Ala Leu Ser Leu Glu Arg Ala Arg Gly Thr Gly			
	85	90	95
Ala Ser Met Ala Val Ala Ala Arg Ser Gly Arg Arg Arg Arg Ser Gly			
	100	105	110
Ala Asp Gln Glu Lys Ala Glu Arg Gly Glu Gly Ala Ser Arg Ser Pro			
	115	120	125
Arg Gly Val Leu Arg Asp Gly Gly Gln Gln Glu Pro Gly Thr Arg Glu			
	130	135	140
Arg Asp Pro Asp Lys Ala Thr Arg Phe Arg Met Glu Glu Leu Arg Leu			
145	150	155	160
Thr Ser Thr Thr Phe Ala Leu Thr Gly Asp Ser Ala His Asn Gln Ala			
	165	170	175
Met Val His Trp Ser Gly His Asn Ser Ser Val Ile Leu Ile Leu Thr			
	180	185	190
Lys Leu Tyr Asp Tyr Asn Leu Gly Ser Ile Thr Glu Ser Ser Leu Trp			
	195	200	205
Arg Ser Thr Asp Tyr Gly Thr Thr Tyr Glu Lys Leu Asn Asp Lys Val			
	210	215	220
Gly Leu Lys Thr Ile Leu Ser Tyr Leu Tyr Val Cys Pro Thr Asn Lys			
225	230	235	240
Arg Lys Ile Met Leu Leu Thr Asp Pro Glu Ile Glu Ser Ser Leu Leu			
	245	250	255
Ile Ser Ser Asp Glu Gly Ala Thr Tyr Gln Lys Tyr Arg Leu Asn Phe			
	260	265	270
Tyr Ile Gln Ser Leu Leu Phe His Pro Lys Gln Glu Asp Trp Ile Leu			
	275	280	285
Ala Tyr Ser Gln Asp Gln Lys Leu Tyr Ser Ser Ala Glu Phe Gly Arg			
	290	295	300
Arg Trp Gln Leu Ile Gln Glu Gly Val Val Pro Asn Arg Phe Tyr Trp			
305	310	315	320
Ser Val Met Gly Ser Asn Lys Glu Pro Asp Leu Val His Leu Glu Ala			
	325	330	335
Arg Thr Val Asp Gly His Ser His Tyr Leu Thr Cys Arg Met Gln Asn			
	340	345	350
Cys Thr Glu Ala Asn Arg Asn Gln Pro Phe Pro Gly Tyr Ile Asp Pro			

355	360	365
Asp Ser Leu Ile Val Gln	Asp His Tyr Val Phe Val	Gln Leu Thr Ser
370	375	380
Gly Gly Arg Pro His Tyr Tyr	Val Ser Tyr Arg Arg Asn Ala Phe Ala	
385	390	395
Gln Met Lys Leu Pro Lys Tyr Ala	Leu Pro Lys Asp Met His Val Ile	400
405	410	415
Ser Thr Asp Glu Asn Gln Val Phe	Ala Ala Val Gln Glu Trp Asn Gln	
420	425	430
Asn Asp Thr Tyr Asn Leu Tyr Ile	Ser Asp Thr Arg Gly Val Tyr Phe	
435	440	445
Thr Leu Ala Leu Glu Asn Val Gln	Ser Ser Arg Gly Pro Glu Gly Asn	
450	455	460
Ile Met Ile Asp Leu Tyr Glu Val	Ala Gly Ile Lys Gly Met Phe Leu	
465	470	475
Ala Asn Lys Lys Ile Asp Asn Gln	Val Lys Thr Phe Ile Thr Tyr Asn	
485	490	495
Lys Gly Arg Asp Trp Arg Leu Leu	Gln Ala Pro Asp Thr Asp Leu Arg	
500	505	510
Gly Asp Pro Val His Cys Leu Leu	Pro Tyr Cys Ser Leu His Leu His	
515	520	525
Leu Lys Val Ser Glu Asn Pro Tyr	Thr Ser Gly Ile Ile Ala Ser Lys	
530	535	540
Asp Thr Ala Pro Ser Ile Ile Val	Ala Ser Gly Asn Ile Gly Ser Glu	
545	550	555
Leu Ser Asp Thr Asp Ile Ser Met	Phe Val Ser Ser Asp Ala Gly Asn	
565	570	575
Thr Trp Arg Gln Ile Phe Glu Glu	Glu His Ser Val Leu Tyr Leu Asp	
580	585	590
Gln Gly Gly Val Leu Val Ala Met	Lys His Thr Ser Leu Pro Ile Arg	
595	600	605
His Leu Trp Leu Ser Phe Asp Glu	Gly Arg Ser Trp Ser Lys Tyr Ser	
610	615	620
Phe Thr Ser Ile Pro Leu Phe Val	Asp Gly Val Leu Gly Glu Pro Gly	
625	630	635
Glu Glu Thr Leu Ile Met Thr Val	Phe Gly His Phe Ser His Arg Ser	640

645	650	655
Glu Trp Gln Leu Val Lys Val Asp Tyr Lys Ser Ile Phe Asp Arg Arg		
660	665	670
Cys Ala Glu Glu Asp Tyr Arg Pro Trp Gln Leu His Ser Gln Gly Glu		
675	680	685
Ala Cys Ile Met Gly Ala Lys Arg Ile Tyr Lys Lys Arg Lys Ser Glu		
690	695	700
Arg Lys Cys Met Gln Gly Lys Tyr Ala Gly Ala Met Glu Ser Glu Pro		
705	710	715
Cys Val Cys Thr Glu Ala Asp Phe Asp Cys Asp Tyr Gly Tyr Glu Arg		
725	730	735
His Ser Asn Gly Gln Cys Leu Pro Ala Phe Trp Phe Asn Pro Ser Ser		
740	745	750
Leu Ser Lys Asp Cys Ser Leu Gly Gln Ser Tyr Leu Asn Ser Thr Gly		
755	760	765
Tyr Arg Lys Val Val Ser Asn Asn Cys Thr Asp Gly Val Arg Glu Gln		
770	775	780
Tyr Thr Ala Lys Pro Gln Lys Cys Pro Gly Lys Ala Pro Arg Gly Leu		
785	790	795
Arg Ile Val Thr Ala Asp Gly Lys Leu Thr Ala Glu Gln Gly His Asn		
805	810	815
Val Thr Leu Met Val Gln Leu Glu Glu Gly Asp Val Gln Arg Thr Leu		
820	825	830
Ile Gln Val Asp Phe Gly Asp Gly Ile Ala Val Ser Tyr Val Asn Leu		
835	840	845
Ser Ser Met Glu Asp Gly Ile Lys His Val Tyr Gln Asn Val Gly Ile		
850	855	860
Phe Arg Val Thr Val Gln Val Asp Asn Ser Leu Gly Ser Asp Ser Ala		
865	870	875
Val Leu Tyr Leu His Val Thr Cys Pro Leu Glu His Val His Leu Ser		
885	890	895
Leu Pro Phe Val Thr Thr Lys Asn Lys Glu Val Asn Ala Thr Ala Val		
900	905	910
Leu Trp Pro Ser Gln Val Gly Thr Leu Thr Tyr Val Trp Trp Tyr Gly		
915	920	925

Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg  
 930 935 940  
 Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly  
 945 950 955 960  
 Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe  
 965 970 975  
 Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro  
 980 985 990  
 Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser  
 995 1000 1005  
 Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala Val  
 1010 1015 1020  
 Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro Tyr Gln  
 1025 1030 1035 1040  
 Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu Glu Gln Ile  
 1045 1050 1055  
 Ser Glu Leu Leu Ile His Thr Leu Asn Gln Asn Ser Val His Phe Glu  
 1060 1065 1070  
 Leu Lys Pro Gly Val Arg Val Leu Val His Ala Ala His Leu Thr Ala  
 1075 1080 1085  
 Ala Pro Leu Val Asp Leu Thr Pro Thr His Ser Gly Ser Ala Met Leu  
 1090 1095 1100  
 Val Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Val Ile Tyr  
 1105 1110 1115 1120  
 Lys Phe Lys Arg Lys Tyr Phe His Ser Cys  
 1125 1130

<210> 3325

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3325

Met Met Ser Asp Gly Lys Leu Gly Arg Gln Ser Val Asp Ser Pro Cys  
 1 5 10 15

Ser	Gly	Thr	Thr	Cys	Ser	Leu	Thr	Ala	Ala	Gly	Gly	His	Thr	Thr	Arg
20				25				30							
Ile	Ala	Leu	Leu	Cys	His	Leu	Val	Ile	Val	Phe	Phe	Ala	Leu	Thr	Glu
35				40				45							
Asp	Arg	Lys	Gly	Gly	Lys	Ile	Ser	Phe	Cys	Ala	His	Thr	Pro	Leu	Asn
50				55				60							
Cys	Met	Phe	Gly	Phe	Phe	Cys	Phe	Val	Lys	Gly	Cys	Lys	Thr	Ser	Ser
65				70				75				80			
Ser	Cys	Ser	Thr	Ala	Asn	Thr	Arg	Gly	Gln	His	Pro	Ala	Ser	Cys	Leu
85				90				95							
Cys	Phe	Pro	Ala	Gly	Arg	Thr	His	Arg	Gln	Ser	Gly	Asn	Leu	Thr	Phe
100				105				110							
Pro	Arg	Ser	Glu	Asn	Gly	Leu	Phe	Ser	Ser	Glu	Val	Met	Ile	Arg	Glu
115				120				125							
Ser	Leu	Leu	Ile	Phe	Val	Ile	His	Thr	Lys	Thr	Leu	Thr	Ser	Gly	Glu
130				135				140							
Lys	Leu	Asp	Thr	Leu	Asn	Asn	Glu	Lys	Ser	Glu	Gln	Ala	Phe	Arg	Gly
145				150				155				160			
Cys	Val	Ser	His	Thr	Glu	Gly	Ala	Ser	Pro	Trp	Ala	His	Ser	Gln	Asp
165				170				175							
Pro	Ser	Phe	Thr	Asp	His	Arg	Gly	Cys	Val	Leu	Gln	Val	Ala	Asp	Thr
180				185				190							
Ala	Leu	Trp	Phe												
195															

&lt;210&gt; 3326

&lt;211&gt; 144

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3326

Met Leu Ser Leu Glu Cys Thr Gln Leu Pro His His Ala Ser Cys Thr  
1 5 10 15  
Cys Cys Ser Thr Ala Pro Pro Ser Val Ser Ala Ala Arg Pro Ser Pro  
20 25 30





Asp Ala Gly Val Gln Gly Tyr Val His Pro Arg Pro Ala Gly Ala Gln  
           115                          120                          125  
 Ser Thr Glu Ala Trp Pro Ser Glu Glu Thr Glu Gly Ser Val Gly His  
           130                          135                          140  
 His Asp Glu Ser Leu Val Ser Thr Arg Pro Ser Cys Ala Phe Leu Leu  
   145                          150                          155                          160  
 His Gly Thr Ala Arg Val Gly Val Pro Glu Gly Pro Ser Trp Pro Trp  
                           165                          170                          175  
 Lys Val Pro Tyr Ser Arg Gln Glu  
                           180

<210> 3328

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3328

Met Gly Ser Val Phe Leu Gly Lys Ser Gly Leu Leu Cys Lys Ala Pro  
   1                          5                          10                          15  
 Ala Leu Pro Asp Ser Ser Pro Asn Thr Arg Ala Lys Val Gly Val Leu  
                           20                          25                          30  
 Phe Leu Pro Leu Leu Pro Pro Asn Asp Leu Glu Gly Ile Cys Val Pro  
                           35                          40                          45  
 Ala Val Pro Phe Pro Ala Thr Phe Ala Pro Gly Asn Ser Pro Pro His  
                           50                          55                          60  
 Thr Ser Pro His Leu Ile Gly Asn Phe Pro Leu Pro Asp Leu Arg Ser  
   65                          70                          75                          80  
 Ile Ser Thr Pro Ser Leu Gln Asn Gly Asp Asn Glu Leu Thr Lys Ser  
                           85                          90                          95  
 Met Phe Asn Thr Leu Leu Thr Glu Leu Thr Met Ile Leu Gly Gly Ser  
                           100                          105                          110  
 Gly Met

&lt;210&gt; 3329

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3329

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Met Lys Cys Thr Ala Val Leu Cys Cys Arg Met Ala Pro Leu Gln Lys
  1             5             10             15
Ala Gln Ile Val Arg Met Val Lys Asn Leu Lys Gly Ser Pro Ile Thr
      20             25             30
Leu Ser Ile Gly Asp Gly Ala Asn Asp Val Ser Met Ile Leu Glu Ser
      35             40             45
His Val Gly Ile Gly Ile Lys Gly Lys Glu Gly Arg Gln Ala Ala Arg
      50             55             60
Asn Ser Asp Tyr Ser Val Pro Lys Phe Lys His Leu Lys Lys Leu Leu
      65             70             75             80
Leu Ala His Gly His Leu Tyr Tyr Val Arg Ile Ala His Leu Val Gln
      85             90             95
Tyr Phe Phe Tyr Lys Asn Leu Cys Phe Ile Leu Pro Gln Phe Leu Tyr
      100            105            110
Gln Phe Phe Cys Gly Phe Ser Gln Gln Pro Leu Tyr Asp Ala Ala Tyr
      115            120            125
Leu Thr Met Tyr Asn Ile Cys Phe Thr Ser Leu Pro Ile Leu Ala Tyr
      130            135            140
Ser Leu Leu Glu Gln His Ile Asn Ile Asp Thr Leu Thr Ser Asp Pro
      145            150            155            160
Arg Leu Tyr Met Lys Ile Ser Gly Asn Ala Met Leu Gln Leu Gly Pro
      165            170            175
Phe Leu Tyr Trp Thr Phe Leu Ala Ala Phe Glu Gly Thr Val Phe Phe
      180            185            190
Phe Gly Thr Tyr Phe Leu Phe Gln Thr Ala Ser Leu Glu Glu Asn Gly
      195            200            205
Lys Val Tyr Gly Asn Trp Thr Phe Gly Thr Ile Val Phe Thr Val Leu
      210            215            220
Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr Arg Phe Trp Thr
      225            230            235            240

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Trp	Ile	Asn	His	Phe	Val	Ile	Trp	Gly	Ser	Leu	Ala	Phe	Tyr	Val	Phe	
245					250					255						
Phe	Ser	Phe	Phe	Trp	Gly	Gly	Ile	Ile	Trp	Pro	Phe	Leu	Lys	Gln	Gln	
260					265					270						
Arg	Met	Tyr	Phe	Val	Phe	Ala	Gln	Met	Leu	Ser	Ser	Val	Ser	Thr	Trp	
275					280					285						
Leu	Ala	Ile	Ile	Leu	Leu	Ile	Phe	Ile	Ser	Leu	Phe	Pro	Glu	Ile	Leu	
290					295					300						
Leu	Ile	Val	Leu	Lys	Asn	Val	Arg	Arg	Arg	Ser	Ala	Arg	Val	His	His	
305					310					315					320	
Leu	Ile	Ser	Ser	Ser	Ala											
325																

<210> 3330

&lt;211&gt; 913

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3330

Met	Pro	Gly	Glu	Ala	Val	Glu	Tyr	His	Ser	Ile	Gln	Leu	Ile	Arg	Asp
1				5					10					15	
Glu	Phe	Leu	Met	Asn	Val	Gln	Lys	Phe	Ala	Ser	Asn	Ile	Gln	Arg	Thr
				20				25					30		
Met	Gln	Gln	Leu	Glu	Gly	Glu	Ile	Lys	Leu	Glu	Met	Pro	Ile	Ile	Ser
				35				40					45		
Val	Glu	Gly	Glu	Val	Ser	Asp	Leu	Ala	Ala	Asp	Pro	Glu	Thr	Val	Asp
				50				55				60			
Ile	Leu	Glu	Gln	Cys	Val	Ile	Asn	Trp	Leu	Asn	Gln	Ile	Ser	Thr	Ala
				65				70				75			80
Val	Glu	Ala	Gln	Leu	Lys	Lys	Thr	Pro	Gln	Gly	Lys	Gly	Pro	Leu	Ala
				85				90					95		
Glu	Ile	Glu	Phe	Trp	Arg	Glu	Arg	Asn	Ala	Thr	Leu	Ser	Ala	Leu	His
				100				105					110		
Glu	Gln	Thr	Lys	Leu	Pro	Ile	Val	Arg	Lys	Val	Leu	Asp	Val	Ile	Lys
				115				120				125			

Glu Ser Asp Ser Met Leu Val Ala Asn Leu Gln Pro Val Phe Thr Glu  
 130 135 140  
 Leu Phe Lys Phe His Thr Glu Ala Ser Asp Asn Val Arg Phe Leu Ser  
 145 150 155 160  
 Thr Val Glu Arg Tyr Phe Lys Asn Ile Thr His Gly Ser Gly Phe His  
 165 170 175  
 Val Val Leu Asp Thr Ile Pro Ala Met Met Ser Ala Leu Arg Met Val  
 180 185 190  
 Trp Ile Ile Ser Arg His Tyr Asn Lys Asp Glu Arg Met Ile Pro Leu  
 195 200 205  
 Met Glu Arg Ile Ala Trp Glu Ile Ala Glu Arg Val Cys Arg Val Val  
 210 215 220  
 Asn Leu Arg Thr Leu Phe Lys Glu Asn Arg Ala Ser Ala Gln Ser Lys  
 225 230 235 240  
 Thr Leu Glu Ala Arg Asn Thr Leu Arg Leu Trp Lys Lys Ala Tyr Phe  
 245 250 255  
 Asp Thr Arg Ala Lys Ile Glu Ala Ser Gly Arg Glu Asp Arg Trp Glu  
 260 265 270  
 Phe Asp Arg Lys Arg Leu Phe Glu Arg Thr Asp Tyr Met Ala Thr Ile  
 275 280 285  
 Cys Gln Asp Leu Ser Asp Val Leu Gln Val Leu Glu Glu Phe Tyr Asn  
 290 295 300  
 Ile Phe Gly Pro Glu Leu Lys Ala Val Thr Gly Asp Pro Lys Arg Ile  
 305 310 315 320  
 Asp Asp Val Leu Cys Arg Val Asp Gly Leu Val Thr Pro Met Glu Asn  
 325 330 335  
 Leu Thr Phe Asp Pro Phe Ser Ile Lys Ser Ser Gln Phe Trp Lys Tyr  
 340 345 350  
 Val Met Asp Glu Phe Lys Ile Glu Val Leu Ile Asp Ile Ile Asn Lys  
 355 360 365  
 Ile Phe Val Gln Asn Leu Glu Asn Pro Pro Leu Tyr Lys Asn His Pro  
 370 375 380  
 Pro Val Ala Gly Ala Ile Tyr Trp Glu Arg Ser Leu Phe Phe Arg Ile  
 385 390 395 400  
 Lys His Thr Ile Leu Arg Phe Gln Glu Val Gln Glu Ile Leu Asp Ser

	405		410		415
Asp Arg Gly Gln Glu Val Lys Gln Lys Tyr Leu Glu Val Gly Arg Thr					
	420		425		430
Met Lys Glu Tyr Glu Asp Arg Lys Tyr Glu Gln Trp Met Glu Val Thr					
	435		440		445
Glu Gln Val Leu Pro Ala Leu Met Lys Lys Ser Leu Leu Thr Lys Ser					
	450		455		460
Ser Ile Ala Thr Glu Glu Pro Ser Thr Leu Glu Arg Gly Ala Val Phe					
465		470		475	480
Ala Ile Asn Phe Ser Pro Ala Leu Arg Glu Ile Ile Asn Glu Thr Lys					
	485		490		495
Tyr Leu Glu Gln Leu Gly Phe Thr Val Pro Glu Leu Ala Arg Asn Val					
	500		505		510
Ala Leu Gln Glu Asp Lys Phe Leu Arg Tyr Thr Ala Gly Ile Gln Arg					
	515		520		525
Met Leu Asp His Tyr His Met Leu Ile Gly Thr Leu Asn Asp Ala Glu					
	530		535		540
Ser Val Leu Leu Lys Asp His Ser Gln Glu Leu Leu Arg Val Phe Arg					
545		550		555	560
Ser Gly Tyr Lys Arg Leu Asn Trp Asn Ser Leu Gly Ile Gly Asp Tyr					
	565		570		575
Ile Thr Gly Cys Lys Gln Ala Ile Gly Lys Phe Glu Ser Leu Val His					
	580		585		590
Gln Ile His Lys Asn Ala Asp Asp Ile Ser Ser Arg Leu Thr Leu Ile					
	595		600		605
Glu Ala Ile Asn Leu Phe Lys Tyr Pro Ala Ala Lys Ser Glu Glu Glu					
	610		615		620
Leu Pro Gly Val Lys Glu Phe Phe Glu His Ile Glu Arg Glu Arg Ala					
625		630		635	640
Ser Asp Val Asp His Met Val Arg Trp Tyr Leu Ala Ile Gly Pro Leu					
	645		650		655
Leu Thr Lys Val Glu Gly Leu Val Val His Thr Asn Thr Gly Lys Ala					
	660		665		670
Pro Lys Leu Ala Ser Tyr Tyr Lys Tyr Trp Glu Lys Lys Ile Tyr Glu					
	675		680		685
Val Leu Thr Lys Leu Ile Leu Lys Asn Leu Gln Ser Phe Asn Ser Leu					

690	695	700	
Ile Leu Gly Asn Val	Pro Leu Phe His Thr	Glu Thr Ile Leu Thr	Ala
705	710	715	720
Pro Glu Ile Ile Leu His	Pro Asn Thr Asn Glu Ile	Asp Lys Met Cys	
	725	730	735
Phe His Cys Val Arg Asn	Cys Val Glu Ile Thr Lys	His Phe Val Arg	
	740	745	750
Trp Met Asn Gly Ser Cys	Ile Glu Cys Pro Pro Gln	Lys Gly Glu Glu	
	755	760	765
Glu Glu Val Val Ile Ile	Asn Phe Tyr Asn Asp Ile	Ser Leu Asn Pro	
	770	775	780
Gln Ile Ile Glu Gln Ala	Val Met Ile Pro Gln Asn	Val His Arg Ile	
785	790	795	800
Leu Ile Asn Leu Met Lys	Tyr Leu Gln Lys Trp Lys	Arg Tyr Arg Pro	
	805	810	815
Leu Trp Lys Leu Asp Lys	Ala Ile Val Met Glu Lys	Phe Ala Ala Lys	
	820	825	830
Lys Pro Pro Cys Val Ala	Tyr Asp Glu Lys Leu Gln	Phe Tyr Ser Lys	
	835	840	845
Ile Ala Tyr Glu Val Met	Arg His Pro Leu Ile Lys	Asp Glu His Cys	
	850	855	860
Ile Arg Leu Gln Leu Arg	His Leu Ala Asn Thr Val	Gln Glu Asn Ala	
865	870	875	880
Lys Ser Trp Val Ile Ser	Leu Gly Lys Leu Leu Asn	Glu Ser Ala Lys	
	885	890	895
Glu Glu Leu Tyr Asn Leu	His Glu Glu Met Glu Val	Leu Asn Arg Cys	
	900	905	910
Val			

&lt;210&gt; 3331

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3331

Met Leu Leu Pro Phe Ile Arg Thr Leu Pro Leu Leu Cys Tyr Asn His  
 1 5 10 15  
 Leu Leu Val Ser Pro Asp Ser Ala Thr Leu Ser Pro Pro Tyr Ser Leu  
 20 25 30  
 Glu Lys Met Thr Asp Leu Val Ala Val Trp Asp Val Ala Leu Ser Asp  
 35 40 45  
 Gly Val His Lys Ile Glu Phe Glu His Gly Thr Thr Ser Gly Lys Arg  
 50 55 60  
 Val Val Tyr Val Asp Gly Lys Glu Glu Ile Arg Lys Glu Trp Met Phe  
 65 70 75 80  
 Lys Leu Val Gly Lys Glu Thr Phe Tyr Val Gly Ala Ala Lys Thr Lys  
 85 90 95  
 Ala Thr Ile Asn Ile Asp Ala Ile Ser Gly Phe Ala Tyr Glu Tyr Thr  
 100 105 110  
 Leu Glu Ile Asn Gly Lys Ser Leu Lys Lys Tyr Met Glu Asp Arg Ser  
 115 120 125  
 Lys Thr Thr Asn Thr Trp Val Leu His Met Asp Gly Glu Asn Phe Arg  
 130 135 140  
 Ile Val Leu Glu Lys Asp Ala Met Asp Val Trp Cys Asn Gly Lys Lys  
 145 150 155 160  
 Leu Glu Thr Ala Val Ser  
 165

&lt;210&gt; 3332

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3332

Met Leu Trp Tyr Glu Leu Pro Gly Tyr Leu Arg Leu Pro Cys Lys Gln  
 1 5 10 15  
 Leu Trp Pro Asp Trp Val Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys  
 20 25 30  
 Ser Val Gly Pro Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu Ile



35 40 45  
 Arg Pro Asn Ser Ser Arg Arg Ala Lys Val Ser Tyr Gly Arg Gln Leu  
 50 55 60  
 Ser Leu Glu Lys Trp Pro Ser Leu Ala Thr Leu Tyr Tyr Arg Cys Ser  
 65 70 75 80  
 Cys Thr Lys Pro Ser Gly His His Met Ser Trp Leu Ala Ala Leu Ser  
 85 90 95  
 Leu Cys Leu Ser Ser Gly Gly Cys Ile Ser Glu Arg Cys Arg Ser Ala  
 100 105 110  
 Ile Thr Gln Cys Ser Gln Pro Arg Met Glu Asp Leu Tyr Phe Trp Pro  
 115 120 125  
 Ser

<210> 3333

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3333

Met Pro Cys Thr Pro Pro Pro Pro Pro Pro His Ile Arg Leu Ala  
 1 5 10 15  
 Ala Gly Ser Leu Glu Ala Ala Arg Leu Thr Pro Pro Arg Gly Pro Gly  
 20 25 30  
 Pro Met Ala Gly Ile Arg Ser Arg Pro Pro Ala Cys Thr Ser Glu Gln  
 35 40 45  
 Arg Gln Ala Gln Leu Ala Ala Thr His Pro Pro Leu Ala Ala Gly Arg  
 50 55 60  
 Pro Cys Ser Val Ser Trp Ser Phe Pro Arg Pro Cys Gly Pro Leu Thr  
 65 70 75 80  
 Ala Pro Leu Leu Cys Leu His Arg Ser Leu Arg Ala Leu Leu Leu Ala  
 85 90 95  
 Ser Ala Pro His Thr Ser Ala Ala Ala Trp Cys Arg Thr Leu Gly Arg  
 100 105 110

Tyr Pro Pro Pro

115

<210> 3334

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3334

Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg

1 5 10 15

Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala

20 25 30

Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His

35 40 45

Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp

50 55 60

Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg

65 70 75 80

Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg

85 90 95

Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp

100 105 110

Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val

115 120 125

Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr

130 135 140

Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe

145 150 155 160

Thr Asn Lys Ser Asp Trp Ser Ile

165

<210> 3335

<211> 343

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3335

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Met Val Thr Gly Arg Arg Glu Asp Val Ala Thr Ala Arg Arg Glu Ile
  1             5             10            15
Ile Ser Ala Ala Glu His Phe Ser Met Ile Arg Ala Ser Arg Asn Lys
      20             25            30
Ser Gly Ala Ala Phe Gly Val Ala Pro Ala Leu Pro Gly Gln Val Thr
      35             40            45
Ile Arg Val Arg Val Pro Tyr Arg Val Val Gly Leu Val Val Gly Pro
      50             55            60
Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln Gln Thr Asn Thr Tyr Ile
      65             70            75            80
Ile Thr Pro Ser Arg Asp Arg Asp Pro Val Phe Glu Ile Thr Gly Ala
      85             90            95
Pro Gly Asn Val Glu Arg Ala Arg Glu Glu Ile Glu Thr His Ile Ala
      100            105            110
Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn Asn Glu Asn Asp Phe Leu
      115            120            125
Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser Arg Tyr Ser Asp Ala Trp
      130            135            140
Arg Val His Gln Pro Gly Cys Lys Pro Leu Ser Thr Phe Arg Gln Asn
      145            150            155            160
Ser Leu Gly Cys Ile Gly Glu Cys Gly Val Asp Ser Gly Phe Glu Ala
      165            170            175
Pro Arg Leu Gly Glu Gln Gly Gly Asp Phe Gly Tyr Gly Gly Tyr Leu
      180            185            190
Phe Pro Gly Tyr Gly Val Gly Lys Gln Asp Val Tyr Tyr Gly Val Ala
      195            200            205
Glu Thr Ser Pro Pro Leu Trp Ala Gly Gln Glu Asn Ala Thr Pro Thr
      210            215            220
Ser Val Leu Phe Ser Ser Ala Ser Ser Ser Ser Ser Ser Ala Lys
      225            230            235            240
Ala Arg Ala Gly Pro Pro Gly Ala His Arg Ser Pro Ala Thr Ser Ala
      245            250            255

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Gly Pro Glu Leu Ala Gly Leu Pro Arg Arg Pro Pro Gly Glu Pro Leu  
                   260                                  265                                  270  
 Gln Gly Phe Ser Lys Leu Gly Gly Gly Gly Leu Arg Ser Pro Gly Gly  
                   275                                  280                                  285  
 Gly Arg Asp Cys Met Val Cys Phe Glu Ser Glu Val Thr Ala Ala Leu  
                   290                                  295                                  300  
 Val Pro Cys Gly His Asn Leu Phe Cys Met Glu Cys Ala Val Arg Ile  
 305                                  310                                  315                                  320  
 Cys Glu Arg Thr Asp Pro Glu Cys Pro Val Cys His Ile Thr Ala Thr  
                                   325                                  330                                  335  
 Gln Ala Ile Arg Ile Phe Ser  
                                   340

<210> 3336

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3336

Met Asp Ala Ala Val Thr Asp Asp Phe Gln Gln Ile Leu Pro Ile Glu  
   1                                  5                                  10                                  15  
 Gln Leu Arg Ser Thr His Ala Ser Asn Asp Tyr Val Glu Arg Pro Pro  
                   20                                  25                                  30  
 Ala Pro Cys Lys Gln Ala Leu Ser Ser Pro Ser Leu Ile Val Gln Thr  
                   35                                  40                                  45  
 His Lys Ser Asp Trp Ser Leu Ala Thr Met Pro Thr Ser Leu Pro Arg  
                   50                                  55                                  60  
 Ser Leu Ser Gln Cys His Gln Leu Gln Pro Leu Pro Gln His Leu Ser  
                   65                                  70                                  75                                  80  
 Gln Ser Ser Ile Ala Ser Ser Met Ser His Ser Thr Thr Ala Ser Ser  
                                   85                                  90                                  95  
 Thr Thr Ala Pro Leu Met Met Lys Thr Thr Val Leu Met Ser Pro Ala  
                   100                                  105                                  110  
 Leu Val Gly Leu Val Leu Ala Leu Ser Ala Gly Gln Pro  
                   115                                  120                                  125

&lt;210&gt; 3337

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3337

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Met Cys Val Tyr Thr Tyr Ile Cys Glu Tyr Arg Cys Ile Tyr Val Cys
  1             5             10             15
Ile Tyr Ile His Val Phe Val Tyr Val Cys Tyr Ile Tyr Leu Tyr Val
      20             25             30
Tyr Val Cys Val Ile Tyr Ile His Val Cys Val Cys Val Cys Val Leu
      35             40             45
Tyr Ile His Val Cys Val Tyr Val Cys Val Tyr Ala Leu Arg Arg Gln
      50             55             60
Asn Cys Pro Glu Glu Gly Trp Tyr Leu Gly Phe Pro Ser Pro Ser Leu
      65             70             75             80
Cys His Leu Val Pro Asn Arg Ala Asn Gly Pro Ser Leu Gln Thr Glu
      85             90             95
Ala Glu Ser Pro Gly Leu Gly Arg Gly Asp Arg Gly Thr Gly Gln Pro
      100            105            110
Gln Trp Gly Thr Gly Asp Pro Gly Leu His Pro Asn Thr Gly Thr Arg
      115            120            125
Asp Arg Cys His Glu Leu Leu Leu Leu Glu Pro Ser Ala Gln Gly Ser
      130            135            140
Gly Leu Tyr Pro
145

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&lt;210&gt; 3338

&lt;211&gt; 172

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3338

Met Asn Ala Val Gly Cys Cys Gly Leu Gln Leu Tyr Lys Phe Gly Glu  
 1 5 10 15  
 Thr Val Ser Ile Val Phe Trp Thr Asp Thr Trp Arg Pro Glu Ser Phe  
 20 25 30  
 Phe Asp Lys Val Lys Lys Asn Arg Gln Asn Gly Met His Thr Leu Cys  
 35 40 45  
 Leu Leu Asp Ile Lys Val Lys Glu Gln Ser Leu Glu Asn Leu Ile Lys  
 50 55 60  
 Gly Arg Lys Ile Tyr Glu Pro Pro Arg Tyr Met Ser Val Asn Gln Ala  
 65 70 75 80  
 Ala Gln Gln Leu Leu Glu Ile Val Gln Asn Gln Arg Ile Arg Gly Glu  
 85 90 95  
 Glu Pro Ala Val Thr Glu Glu Thr Leu Cys Val Gly Leu Ala Arg Val  
 100 105 110  
 Gly Ala Asp Asp Gln Lys Ile Ala Ala Gly Thr Leu Arg Gln Met Cys  
 115 120 125  
 Thr Val Asp Leu Gly Glu Pro Leu His Ser Leu Ile Ile Thr Gly Gly  
 130 135 140  
 Ser Ile His Pro Met Glu Met Glu Met Leu Ser Leu Phe Ser Ile Pro  
 145 150 155 160  
 Glu Asn Ser Ser Glu Ser Gln Ser Ile Asn Gly Leu  
 165 170

<210> 3339

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3339

Met His Leu Thr Ser Pro Pro Val Leu Arg Thr Pro Cys Cys Ser Gly  
 1 5 10 15  
 His Arg Val Ser Gln Gln Trp His Ile Asp Thr Trp Ala Arg Glu Phe  
 20 25 30  
 Phe Ala Ala Gly Gly Gly Gly Gly Pro Val Cys Cys Arg Leu Leu Cys  
 35 40 45

Gly Ser Phe Ser Leu Cys Pro Leu Ile Glu Ala Pro Leu Pro Trp Leu  
 50 55 60  
 Gln Pro Lys Met Ser Pro Asp Ile Ala Lys Cys Pro Gly Ala Gly Ala  
 65 70 75 80  
 Arg Gly Thr Met Ser Pro Leu Thr His Leu Glu Asn His Cys Tyr Lys  
 85 90 95  
 Arg Thr Gly Thr Ala Lys Glu Ala Ile Ile Ser Arg Lys Ser Cys Cys  
 100 105 110  
 Arg Phe Ser Leu Asn Lys Gly Val Ser Ile Leu Arg Asn Pro Pro Lys  
 115 120 125  
 Asp Cys Trp Pro Ser Leu Ser  
 130 135

<210> 3340

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3340

Met Phe Ser Ile Thr Leu Ile Asn His Phe Asp Leu Ser Ile Leu Ile  
 1 5 10 15  
 Thr Thr Met Val Leu Val Pro Ser Tyr Thr Leu Leu Gly Phe Lys Thr  
 20 25 30  
 Phe Leu Glu Val Arg Asp Gln Glu His Tyr Arg Glu Phe Pro Glu Ala  
 35 40 45  
 Asn Phe Glu Leu Ser Ala Thr Asp Phe Leu Val Cys Phe Ile Pro Tyr  
 50 55 60  
 Phe Gln Thr Leu Leu Phe Val Phe Val Leu Arg Cys Met Glu Leu Lys  
 65 70 75 80  
 Cys Gly Lys Lys Arg Met Arg Lys Asp Pro Val Phe Arg Ile Ser Pro  
 85 90 95  
 Gln Ser Arg Asp Ala Lys Pro Asn Pro Glu Glu Pro Ile Asp Glu Asp  
 100 105 110  
 Glu Asp Ile Gln Thr Glu Arg Ile Arg Thr Ala Thr Ala Leu Thr Thr  
 115 120 125

Ser Ile Leu Asp Glu Lys Pro Val Ile Ile Ala Ser Cys Leu His Lys  
 130 135 140  
 Glu Tyr Ala Gly Gln Lys Lys Ser Cys Phe Ser Lys Arg Lys Lys Lys  
 145 150 155 160  
 Ile Ala Ala Arg Asn Ile Ser Phe Cys Val Gln Glu Gly Glu Ile Leu  
 165 170 175  
 Gly Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser Ser Ser Ile Arg Met  
 180 185 190  
 Ile Ser Gly Ile Thr Lys Pro Thr Ala Gly Glu Val Glu Leu Lys Gly  
 195 200 205  
 Cys Ser Ser Val Leu Gly His Leu Gly Tyr Cys Pro Gln Glu Asn Val  
 210 215 220  
 Leu Trp Pro Met Leu Thr Leu Arg Glu His Leu Glu Val Tyr Ala Ala  
 225 230 235 240  
 Val Lys Gly Leu Arg Lys Ala Asp Ala Arg Leu Ala Ile Ala Arg Leu  
 245 250 255  
 Val Ser Ala Phe Lys Leu His Glu Gln Leu Asn Val Pro Val Gln Lys  
 260 265 270  
 Leu Thr Ala Gly Ile Thr Arg Lys Leu Cys Phe Val Leu Ser Leu Leu  
 275 280 285  
 Gly Asn Ser Pro Val Leu Leu Leu Asp Glu Pro Ser Thr Gly Ile Asp  
 290 295 300  
 Pro Thr Gly Gln Gln Gln Met Trp Gln Ala Ile Gln Ala Val Val Lys  
 305 310 315 320  
 Asn Thr Glu Arg Gly Val Leu Leu Thr Thr His Asn Leu Ala Glu Ala  
 325 330 335  
 Glu Ala Leu Cys Asp Arg Val Ala Ile Met Val Ser Gly Arg Leu Arg  
 340 345 350  
 Cys Ile Gly Ser Ile Gln His Leu Lys Asn Lys Leu Gly Lys Asp Tyr  
 355 360 365  
 Ile Leu Glu Leu Lys Val Lys Glu Thr Ser Gln Val Thr Leu Val His  
 370 375 380  
 Thr Glu Ile Leu Lys Leu Phe Pro Gln Ala Ala Gly Gln Glu Arg Tyr  
 385 390 395 400  
 Ser Ser Leu Leu Thr Tyr Lys Leu Pro Val Ala Asp Val Tyr Pro Leu



405 410 415  
 Ser Gln Thr Phe His Lys Leu Glu Ala Val Lys His Asn Phe Asn Leu  
 420 425 430  
 Gly Glu Tyr Ser Leu Ser Gln Cys Thr Leu Glu Lys Val Phe Leu Glu  
 435 440 445  
 Leu Ser Lys Glu Gln Glu Val Gly Asn Phe Asp Glu Glu Ile Asp Thr  
 450 455 460  
 Thr Met Arg Trp Lys Leu Leu Pro His Ser Asp Glu Pro  
 465 470 475

<210> 3341

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3341

Met Gly Asn Pro Ile Leu Gln Gln His Tyr Ile Arg Glu Ala Thr Met  
 1 5 10 15  
 Glu Gln Gly Thr Arg Pro Lys Lys Pro Pro Cys Ala Tyr Ser Thr Val  
 20 25 30  
 His Arg Val Pro Ser Ala Pro Glu Gly Pro Cys Pro Pro Thr Ser Thr  
 35 40 45  
 Ala Pro Ser Ser Gly Pro Pro Arg Ala Leu Gly Arg Phe Leu Cys Gln  
 50 55 60  
 Thr Ser Pro Ala Thr His Ser Ser Gly Ser Arg Ala Pro Pro Pro Gln  
 65 70 75 80  
 Gln Gln Ser Ser Arg Asp Leu Pro Gln Gly Arg Ser Pro Ala Pro Gly  
 85 90 95  
 Trp Lys Ala Ala Glu Leu Trp Arg Arg Gly Thr Gln Arg Thr Ala Gly  
 100 105 110  
 Arg Ala Cys Pro Arg Leu Pro Ala Arg Pro Glu Gly Ser Ala Arg Ser  
 115 120 125  
 Lys Asn Gln Lys Ser Ser Met Arg Ser Pro Ala Gly Arg Arg Gly Val  
 130 135 140  
 Ala Gln Pro Val Leu Ile Leu Ser Trp Arg Lys Pro Ser Gly Arg Val

145                      150                      155                      160  
 Leu Gly Arg Thr Arg Leu Pro Pro Arg Leu Leu Ser Ala Ala Cys Pro  
                          165                      170                      175  
 Ala Arg Thr Ser Val  
                          180

<210> 3342

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3342

Met Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser  
   1                      5                      10                      15  
 Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met  
                          20                      25                      30  
 Ser His Cys Ala Trp Thr Ile Phe Thr Phe Phe Phe Glu Thr Glu Ser  
                          35                      40                      45  
 Cys Ser Val Thr Gln Thr Glu Val Gln Trp Arg Arg Leu Gly Ser Leu  
   50                      55                      60  
 Gln Ala Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Pro  
   65                      70                      75                      80  
 Asn Ser Trp Asp Tyr Arg Arg Pro Pro Pro Phe Leu Ala Asn Phe Phe  
                          85                      90                      95  
 Val Phe Leu Val Ala Met Gly Phe His His Val Ser Gln Asp Gly Leu  
                          100                      105                      110  
 Asp Ile Leu Thr Ser  
                          115

<210> 3343

<211> 128

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3343

Met Cys His His Ala Trp Leu Ile Phe Ile Phe Leu Val Glu Thr Gly  
 1 5 10 15  
 Phe His His Val Val Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp  
 20 25 30  
 Leu Pro Thr Ser Ala Ser Gln Gly Ala Gly Ile Thr Gly Met Ser His  
 35 40 45  
 His Ala Trp Pro Phe Leu Thr Leu Leu Tyr Asp Met Pro Ile Ala Ser  
 50 55 60  
 Leu Arg Ala Ser Val Pro Cys Tyr Phe Thr Leu Gly Phe Arg Trp Arg  
 65 70 75 80  
 Glu Gln Leu Leu Phe Gly Thr Leu Ala Ile Ala Trp Gln Met Gly Ile  
 85 90 95  
 Cys His Phe Cys Ser Tyr Leu Val Gly Ser Thr Ile Thr Phe Arg Ala  
 100 105 110  
 Asn Pro Ala Ala Lys Pro Gly Ile Asn Arg Ala Glu Lys Tyr Ile Leu  
 115 120 125

&lt;210&gt; 3344

&lt;211&gt; 752

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3344

Met Glu Thr Val Val Ala Gly Gly Ser Gly Gly Asp Gly Glu Glu Glu  
 1 5 10 15  
 Glu Glu Ala Leu Pro Glu Gln Ser Glu Gly Lys Glu Gln Lys Ile Leu  
 20 25 30  
 Leu Asp Thr Ala Cys Lys Met Val Arg Trp Leu Ser Ala Lys Leu Gly  
 35 40 45  
 Pro Thr Val Ala Ser Arg His Val Ala Arg Asn Leu Leu Arg Leu Leu  
 50 55 60  
 Thr Ser Cys Tyr Val Gly Pro Thr Arg Gln Gln Phe Thr Val Ser Ser  
 65 70 75 80  
 Gly Glu Ser Pro Pro Leu Ser Ala Gly Asn Ile Tyr Gln Lys Arg Pro

	85		90		95										
Val	Leu	Gly	Asp	Ile	Val	Ser	Gly	Pro	Val	Leu	Ser	Cys	Leu	Leu	His
	100						105						110		
Ile	Ala	Arg	Leu	Tyr	Gly	Glu	Pro	Val	Leu	Thr	Tyr	Gln	Tyr	Leu	Pro
	115						120						125		
Tyr	Ile	Ser	Tyr	Leu	Val	Ala	Pro	Gly	Ser	Ala	Ser	Gly	Pro	Ser	Arg
	130						135						140		
Leu	Asn	Ser	Arg	Lys	Glu	Ala	Gly	Leu	Leu	Ala	Ala	Val	Thr	Leu	Thr
145					150					155					160
Gln	Lys	Ile	Ile	Val	Tyr	Leu	Ser	Asp	Thr	Thr	Leu	Met	Asp	Ile	Leu
				165					170					175	
Pro	Arg	Ile	Ser	His	Glu	Val	Leu	Leu	Pro	Val	Leu	Ser	Phe	Leu	Thr
	180								185					190	
Ser	Leu	Val	Thr	Gly	Phe	Pro	Ser	Gly	Ala	Gln	Ala	Arg	Thr	Ile	Leu
	195								200					205	
Cys	Val	Lys	Thr	Ile	Ser	Leu	Ile	Ala	Leu	Ile	Cys	Leu	Arg	Ile	Gly
	210						215							220	
Gln	Glu	Met	Val	Gln	Gln	His	Leu	Ser	Glu	Pro	Val	Ala	Thr	Phe	Phe
225						230					235				240
Gln	Val	Phe	Ser	Gln	Leu	His	Glu	Leu	Arg	Gln	Gln	Asp	Leu	Lys	Leu
				245						250					255
Asp	Pro	Ala	Gly	Arg	Gly	Glu	Gly	Gln	Leu	Pro	Gln	Val	Val	Phe	Ser
	260								265					270	
Asp	Gly	Gln	Gln	Arg	Pro	Val	Asp	Pro	Ala	Leu	Leu	Asp	Glu	Leu	Gln
	275								280					285	
Lys	Val	Phe	Thr	Leu	Glu	Met	Ala	Tyr	Thr	Ile	Tyr	Val	Pro	Phe	Ser
	290								295					300	
Cys	Leu	Leu	Gly	Asp	Ile	Ile	Arg	Lys	Ile	Ile	Pro	Asn	His	Glu	Leu
305						310					315				320
Val	Gly	Glu	Leu	Ala	Ala	Leu	Tyr	Leu	Glu	Ser	Ile	Ser	Pro	Ser	Ser
				325						330					335
Arg	Asn	Pro	Ala	Ser	Val	Glu	Pro	Thr	Met	Pro	Gly	Thr	Gly	Pro	Glu
	340								345					350	
Trp	Asp	Pro	His	Gly	Gly	Gly	Cys	Pro	Gln	Asp	Asp	Gly	His	Ser	Gly
	355								360					365	
Thr	Phe	Gly	Ser	Val	Leu	Val	Gly	Asn	Arg	Ile	Gln	Ile	Pro	Asn	Gly

370	375	380	
Ser Arg Pro Glu Asn Pro Gly Pro Leu Gly Pro Ile Ser Gly Val Gly			
385	390	395	400
Gly Gly Gly Leu Gly Ser Gly Ser Asp Asp Asn Ala Leu Lys Gln Glu			
405	410	415	
Leu Pro Arg Ser Val His Gly Leu Ser Gly Asn Trp Leu Ala Tyr Trp			
420	425	430	
Gln Tyr Glu Ile Gly Val Ser Gln Gln Asp Ala His Phe His Phe His			
435	440	445	
Gln Ile Arg Leu Gln Ser Phe Pro Gly His Ser Gly Ala Val Lys Cys			
450	455	460	
Val Ala Pro Leu Ser Ser Glu Asp Phe Phe Leu Ser Gly Ser Lys Asp			
465	470	475	480
Arg Thr Val Arg Leu Trp Pro Leu Tyr Asn Tyr Gly Asp Gly Thr Ser			
485	490	495	
Glu Thr Ala Pro Arg Leu Val Tyr Thr Gln His Arg Lys Ser Val Phe			
500	505	510	
Phe Val Gly Gln Leu Glu Ala Pro Gln His Val Val Ser Cys Asp Gly			
515	520	525	
Ala Val His Val Trp Asp Pro Phe Thr Gly Lys Thr Leu Arg Thr Val			
530	535	540	
Glu Pro Leu Asp Ser Arg Val Pro Leu Thr Ala Val Ala Val Met Pro			
545	550	555	560
Ala Pro His Thr Ser Ile Thr Met Ala Ser Ser Asp Ser Thr Leu Arg			
565	570	575	
Phe Val Asp Cys Arg Lys Pro Gly Leu Gln His Glu Phe Arg Leu Gly			
580	585	590	
Gly Gly Leu Asn Pro Gly Leu Val Arg Ala Leu Ala Ile Ser Pro Ser			
595	600	605	
Gly Arg Ser Val Val Ala Gly Phe Ser Ser Gly Phe Met Val Leu Leu			
610	615	620	
Asp Thr Arg Thr Gly Leu Val Leu Arg Gly Trp Pro Ala His Glu Gly			
625	630	635	640
Asp Ile Leu Gln Ile Lys Ala Val Glu Gly Ser Val Leu Val Ser Ser			
645	650	655	
Ser Ser Asp His Ser Leu Thr Val Trp Lys Glu Leu Glu Gln Lys Pro			

660	665	670	
Thr His His Tyr Lys Ser Ala Ser Asp Pro Ile His Thr Phe Asp Leu			
675	680	685	
Tyr Gly Ser Glu Val Val Thr Gly Thr Val Ser Asn Lys Ile Gly Val			
690	695	700	
Cys Ser Leu Leu Glu Pro Pro Ser Gln Ala Thr Thr Lys Leu Ser Ser			
705	710	715	720
Glu Asn Phe Arg Gly Thr Leu Thr Ser Leu Ala Leu Leu Pro Thr Lys			
725	730	735	
Arg His Leu Leu Leu Gly Ser Asp Asn Gly Val Ile Arg Leu Leu Ala			
740	745	750	

&lt;210&gt; 3345

&lt;211&gt; 805

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3345

Met Ala Arg Leu His Glu His Leu Lys Tyr Phe Val Asn Met Lys Ile			
1	5	10	15
Ser Thr Asp Lys Ser Trp Gln Gly Val Thr Ile Tyr Phe Ser Gly His			
20	25	30	
Glu Thr Pro Gly Glu Gly Glu His Lys Ile Met Glu Phe Ile Arg Ser			
35	40	45	
Glu Lys Ala Lys Pro Asp His Asp Pro Asn Thr Arg His Cys Leu Tyr			
50	55	60	
Gly Leu Asp Ala Asp Leu Ile Met Leu Gly Leu Thr Ser His Glu Ala			
65	70	75	80
His Phe Ser Leu Leu Arg Glu Glu Val Arg Phe Gly Gly Lys Lys Thr			
85	90	95	
Gln Arg Val Cys Ala Pro Glu Glu Thr Thr Phe His Leu Leu His Leu			
100	105	110	
Ser Leu Met Arg Glu Tyr Ile Asp Tyr Glu Phe Ser Val Leu Lys Glu			
115	120	125	

Lys Ile Thr Phe Lys Tyr Asp Ile Glu Arg Ile Ile Asp Asp Trp Ile  
 130 135 140  
 Leu Met Gly Phe Leu Val Gly Asn Asp Phe Ile Pro His Leu Pro His  
 145 150 155 160  
 Leu His Ile Asn His Asp Ala Leu Pro Leu Leu Tyr Gly Thr Tyr Val  
 165 170 175  
 Thr Ile Leu Pro Glu Leu Gly Gly Tyr Ile Asn Glu Ser Gly His Leu  
 180 185 190  
 Asn Leu Pro Arg Phe Glu Lys Tyr Leu Val Lys Leu Ser Asp Phe Asp  
 195 200 205  
 Arg Glu His Phe Ser Glu Val Phe Val Asp Leu Lys Trp Phe Glu Ser  
 210 215 220  
 Lys Val Gly Asn Lys Tyr Leu Asn Glu Ala Ala Gly Val Ala Ala Glu  
 225 230 235 240  
 Glu Ala Arg Asn Tyr Lys Glu Lys Lys Lys Leu Lys Gly Gln Glu Asn  
 245 250 255  
 Ser Leu Cys Trp Thr Ala Leu Asp Lys Asn Glu Gly Glu Met Ile Thr  
 260 265 270  
 Ser Lys Asp Asn Leu Glu Asp Glu Thr Glu Asp Asp Asp Leu Phe Glu  
 275 280 285  
 Thr Glu Phe Arg Gln Tyr Lys Arg Thr Tyr Tyr Met Thr Lys Met Gly  
 290 295 300  
 Val Asp Val Val Ser Asp Asp Phe Leu Ala Asp Gln Ala Ala Cys Tyr  
 305 310 315 320  
 Val Gln Ala Ile Gln Trp Ile Leu His Tyr Tyr Tyr His Gly Val Gln  
 325 330 335  
 Ser Trp Ser Trp Tyr Tyr Pro Tyr His Tyr Ala Pro Phe Leu Ser Asp  
 340 345 350  
 Ile His Asn Ile Ser Thr Leu Lys Ile His Phe Glu Leu Gly Lys Pro  
 355 360 365  
 Phe Lys Pro Phe Glu Gln Leu Leu Ala Val Leu Pro Ala Ala Ser Lys  
 370 375 380  
 Asn Leu Leu Pro Ala Cys Tyr Gln His Leu Met Thr Asn Glu Asp Ser  
 385 390 395 400  
 Pro Ile Ile Glu Tyr Tyr Pro Pro Asp Phe Lys Thr Asp Leu Asn Gly  
 405 410 415

Lys Gln Gln Glu Trp Glu Ala Val Val Leu Ile Pro Phe Ile Asp Glu  
                   420                                  425                                  430  
 Lys Arg Leu Leu Glu Ala Met Glu Thr Cys Asn His Ser Leu Lys Lys  
                   435                                  440                                  445  
 Glu Glu Arg Lys Arg Asn Gln His Ser Glu Cys Leu Met Cys Trp Tyr  
                   450                                  455                                  460  
 Asp Arg Asp Thr Glu Phe Ile Tyr Pro Ser Pro Trp Pro Glu Lys Phe  
 465                                  470                                  475                                  480  
 Pro Ala Ile Glu Arg Cys Cys Thr Arg Tyr Lys Ile Ile Ser Leu Asp  
                                   485                                  490                                  495  
 Ala Trp Arg Val Asp Ile Asn Lys Asn Lys Ile Thr Arg Ile Asp Gln  
                   500                                  505                                  510  
 Lys Ala Leu Tyr Phe Cys Gly Phe Pro Thr Leu Lys His Ile Arg His  
                   515                                  520                                  525  
 Lys Phe Phe Leu Lys Lys Ser Gly Val Gln Val Phe Gln Gln Ser Ser  
                   530                                  535                                  540  
 Arg Gly Glu Asn Met Met Leu Glu Ile Leu Val Asp Ala Glu Ser Asp  
 545                                  550                                  555                                  560  
 Glu Leu Thr Val Glu Asn Val Ala Ser Ser Val Leu Gly Lys Ser Val  
                                   565                                  570                                  575  
 Phe Val Asn Trp Pro His Leu Glu Glu Ala Arg Val Val Ala Val Ser  
                   580                                  585                                  590  
 Asp Gly Glu Thr Lys Phe Tyr Leu Glu Glu Pro Pro Gly Thr Gln Lys  
                   595                                  600                                  605  
 Leu Tyr Ser Gly Arg Thr Ala Pro Pro Ser Lys Val Val His Leu Gly  
                   610                                  615                                  620  
 Asp Lys Glu Gln Ser Asn Trp Ala Lys Glu Val Gln Gly Ile Ser Glu  
 625                                  630                                  635                                  640  
 His Tyr Leu Arg Arg Lys Gly Ile Ile Ile Asn Glu Thr Ser Ala Val  
                                   645                                  650                                  655  
 Val Tyr Ala Gln Leu Leu Thr Gly Arg Lys Tyr Gln Ile Asn Gln Asn  
                   660                                  665                                  670  
 Gly Glu Val Arg Leu Glu Lys Gln Trp Ser Lys Gln Val Val Pro Phe  
                   675                                  680                                  685  
 Val Tyr Gln Thr Ile Val Lys Asp Ile Arg Ala Phe Asp Ser Arg Phe  
                   690                                  695                                  700



Ser	Asn	Ile	Lys	Thr	Leu	Asp	Asp	Leu	Phe	Pro	Leu	Arg	Ser	Met	Val				
					710					715					720				
Phe	Met	Leu	Gly	Thr	Pro	Tyr	Tyr	Gly	Cys	Thr	Gly	Glu	Val	Gln	Asp				
					725					730					735				
Ser	Gly	Asp	Val	Ile	Thr	Glu	Gly	Arg	Ile	Arg	Val	Ile	Phe	Ser	Ile				
					740					745					750				
Pro	Cys	Glu	Pro	Asn	Leu	Asp	Ala	Leu	Ile	Gln	Asn	Gln	His	Lys	Tyr				
					755					760					765				
Ser	Ile	Lys	Tyr	Asn	Pro	Gly	Tyr	Val	Leu	Ala	Ser	Arg	Leu	Gly	Val				
					770					775					780				
Ser	Gly	Tyr	Leu	Val	Ser	Arg	Phe	Thr	Gly	Ser	Ile	Phe	Ile	Gly	Arg				
785					790					795					800				
Gly Ser Arg Arg Lys																			
805																			

&lt;210&gt; 3346

&lt;211&gt; 108

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3346

Met	Tyr	Val	Val	Phe	Tyr	Ala	Asp	Arg	Ile	Ile	Gln	Lys	Asn	Ala	Leu
1					5				10					15	
Lys	Ser	Phe	Ala	Leu	Val	Ala	Gln	Ala	Gly	Val	Gln	Trp	Cys	Asp	Pro
				20				25					30		
Gly	Ser	Leu	Gln	Pro	Leu	Pro	Pro	Gly	Leu	Lys	Arg	Phe	Ser	Cys	Leu
				35				40					45		
Ser	Leu	Leu	Ser	Ser	Trp	Asp	Tyr	Arg	Arg	Ile	Pro	Trp	Glu	His	Pro
	50					55					60				
Pro	Ala	Glu	Ile	Cys	Thr	Ser	Ala	Thr	Ile	Leu	Ser	Gly	Arg	Arg	Lys
65					70					75					80
Gly	Lys	Gly	Ser	Ala	Ala	Ser	Leu	Ala	Thr	Ala	Cys	Ile	Ile	Ser	Ser
				85					90					95	
Gln	Arg	Arg	Ser	Thr	Gly	Ser	Gly	Ser	Phe	Arg	Ala				
				100				105							

&lt;210&gt; 3347

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3347

```

Met Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Arg Glu Ser Leu
 1             5             10             15
Asp Ser Lys His Ser Phe Ile His Ile Pro Ile His Pro Tyr Thr Tyr
      20             25             30
Ser Ser Asn Ser Cys Ser Ser Lys His Pro Ser Ile His Pro Ser Ile
      35             40             45
His Pro Ser Ile His Pro Ser Ile Tyr Thr Ser Ile Tyr Pro Phe Met
      50             55             60
His Leu Tyr Ile Tyr Leu Leu Ile Lys Phe Leu Ser Ile His Pro Ser
      65             70             75             80
Thr Tyr Leu Ser Asn Phe Cys Ser Ser Lys His Pro Pro Ile His Leu
      85             90             95
Ser Thr His Pro Ser Ile His Ala Cys Met His Pro Ser Ile His Thr
      100            105            110
Tyr Ile His Ser Leu Ile Arg Leu Tyr Thr His Pro Ser Met Tyr Leu
      115            120            125
Phe Ile
      130

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&lt;210&gt; 3348

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3348

```

Met Ser Lys Leu Ala Val Leu Thr Arg Thr Leu Glu Gly Met Ala Met
 1             5             10             15

```

Glu His Arg Leu Glu Met Val Arg Phe Ile Phe Thr Ser Pro Ala Pro  
                   20                                  25                                  30  
 Leu Asp Lys Val Leu Gly Met Val Arg Ala Tyr Lys Glu Thr Gln Thr  
                   35                                  40                                  45  
 Ala Ile Asn Ile Ser Leu Tyr Asp Ala Met Pro Trp Arg Pro Asn Pro  
                   50                                  55                                  60  
 Pro Leu Leu Phe Phe Phe Phe Phe Leu Thr Gly Ser His Phe Val Thr  
                   65                                  70                                  75                                  80  
 Gln Ala Gly Val Glu Trp Gly Asp Leu Gly Ser Leu Gln Pro Pro Gln  
                                   85                                  90                                  95  
 Pro Pro Gly Leu Lys Pro Ser Ser Cys Leu Ser Pro Pro Ser Ser Trp  
                   100                                  105                                  110  
 Asp Tyr Arg His Ala Pro Ser Cys Leu Ala Ser Phe Phe Phe Phe Phe  
                   115                                  120                                  125  
 Glu Thr Glu Ser Cys Ser Leu Pro Gln Ala Arg Val Gln Trp His Asp  
                   130                                  135                                  140  
 Leu Gly Ser Leu Gln Ala Pro Pro Pro  
 145                                  150

<210> 3349

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3349

Met Glu Ile Asp Gly Phe Gln Gln Leu Asp Leu Glu Lys Ser Val Pro  
   1                                  5                                  10                                  15  
 Ser Lys Lys Thr Thr Pro Lys Arg Ile Ile His Phe Val Asp Gly Asp  
                   20                                  25                                  30  
 Ile Met Glu Glu Tyr Ser Thr Glu Glu Glu Glu Glu Glu Lys Glu  
                   35                                  40                                  45  
 Glu Gln Ser Thr Asn Ser Thr Leu Asp Pro Ser Lys Leu Ser Trp Gly  
                   50                                  55                                  60  
 Pro Tyr Leu Arg Phe Trp Ala Gly Arg Ile Ala Ser Thr Ser Phe Ser  
                   65                                  70                                  75                                  80

Met Leu Ser Leu Gln Ala Thr Leu Leu Leu Lys Ala Glu Lys Glu Gly  
                     85                    90                    95  
 Leu Lys Gln Leu Leu Arg Ser Leu Ser Gly Cys Met Glu Glu Phe Leu  
                     100                    105                    110  
 Met Trp Val Leu Val Thr Leu Asp  
                     115                    120

<210> 3350

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3350

Met Glu Thr Leu Val Val Trp Lys Ile Gln Glu Thr Ser Ile Leu Thr  
  
           1                    5                    10                    15  
 Ile Ile Lys Ile His Met Gly Cys Ala Gln Trp Leu Ser Pro Val Ile  
                     20                    25                    30  
 Pro Ala Phe Trp Glu Ala Gly Val Gly Gly Leu Leu Glu Ala Arg Tyr  
                     35                    40                    45  
 Ser Arg Pro Ala Trp Gln Pro Gly Glu Ile Pro Cys Ile Gln Lys Ile  
                     50                    55                    60  
 Glu Lys Leu Ala Arg Asp Asp Gly Val Arg Leu Trp Ser Gln Leu Leu  
                     65                    70                    75                    80  
 Gly Arg Leu Arg Trp Glu Asp Cys Leu Ser Leu Gly Gly Arg Gly Cys  
                     85                    90                    95  
 Ser Glu Trp Arg Leu Arg His Trp Thr Pro Ala Trp Ala Thr Val Arg  
                     100                    105                    110  
 Pro Cys Leu Lys Lys Leu Ile Met  
                     115                    120

<210> 3351

<211> 862

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3351

Met Trp Gln Leu Leu Pro Val Glu Gln Asp Thr Ser Asn Val Thr Glu  
 1 5 10 15  
 Met Lys Val Ser Glu Lys Ser His Asn Ala Phe Lys Ala Thr Asn Lys  
 20 25 30  
 Lys Arg Glu Thr Asp Val His Leu Lys Ser Gln Asp Phe Leu Met Lys  
 35 40 45  
 Thr Asn Thr Ser Thr Gly Leu Lys Met Ala Met Glu Arg Ser Leu Asn  
 50 55 60  
 Pro Ile Asn Phe Asn Pro Glu Asn Asn Val Lys Glu Ser Glu Cys Pro  
 65 70 75 80  
 Leu Pro Pro Pro Ser Pro Pro Pro Pro Pro Pro Ser Asn Ala Ser Ser  
 85 90 95  
 Glu Ile Glu Phe Pro Leu Pro Pro Pro Pro Pro Leu Met Met Phe Pro  
 100 105 110  
 Glu Lys Asn Gly Phe Leu Pro Ser Leu Ser Thr Glu Lys Ile Lys Ala  
 115 120 125  
 Glu Phe Glu Ser Phe Pro Gly Leu Pro Leu Pro Pro Pro Pro Val Asp  
 130 135 140  
 Glu Lys Ser Glu Arg Glu Ser Ser Ser Met Phe Leu Pro Pro Pro Pro  
 145 150 155 160  
 Pro Pro Thr Pro Ser Gln Lys Pro Ala His Leu Leu Ser Ser Ser Ala  
 165 170 175  
 Pro Glu Lys His Ser Gly Asp Phe Met Gln Gln Tyr Ser Gln Lys Glu  
 180 185 190  
 Ala Ser Asn Ser Gln Asn Ser Gln Ala Lys Ile Ile Thr Gly Lys Thr  
 195 200 205  
 Gly Val Leu Pro Pro Pro Thr Leu Pro Lys Pro Lys Leu Pro Lys His  
 210 215 220  
 Ile Lys Asp Asn Lys Asn Asp Phe Ser Pro Lys Val Glu Leu Ala Thr  
 225 230 235 240  
 Ser Leu Ser Asp Met Glu Cys Lys Ile Thr Thr Ser Lys Asp Gln Lys  
 245 250 255  
 Lys Val Met Val Met Thr Ser Ser Glu His Thr Glu Thr Lys Gln Asn

260	265	270
Val Ile Ser Lys Ser Leu Asp	Glu Arg Lys Gln Leu Ser Ile Asp Ser	
275	280	285
Ala Asn Cys Leu Ser His Thr	Val Pro Gly Thr Ser Ala Pro Arg Lys	
290	295	300
Lys Gln Ile Ala Pro Leu Ile	Lys Ser His Ser Phe Pro Glu Ser Ser	
305	310	315
Gly Gln Gln Asn Pro Lys Pro	Tyr Met Arg Lys Phe Lys Thr Pro Leu	
325	330	335
Met Ile Ala Glu Glu Lys Tyr	Arg Gln Gln Lys Glu Glu Ile Glu Lys	
340	345	350
Gln Lys Gln Glu Ser Ser Tyr	Tyr Asn Ile Val Lys Thr Gln Ser Gln	
355	360	365
Asn Gln His Ile Thr Glu Val	Glu Lys Glu Met Pro Leu Gln Lys Thr	
370	375	380
Asn Glu Glu Val Ser Leu Ser	Gly Ile Asp Ser Glu Cys Thr Val Val	
385	390	395
Gln Pro Ser Pro Gly Ser Gln	Ser Asn Ala Arg Ile Leu Gly Val Cys	
405	410	415
Ser Asp Asn Gln Leu Ser Thr	Thr Ser Pro Glu Thr Val Ala Ala Lys	
420	425	430
Arg Leu His His Val Leu Ala	Ala Ser Glu Asp Lys Asp Lys Met Lys	
435	440	445
Lys Glu Val Leu Gln Ser Ser	Arg Asp Ile Met Gln Ser Lys Ser Ala	
450	455	460
Cys Glu Ile Lys Gln Ser His	Gln Glu Cys Ser Thr Gln Gln Thr Gln	
465	470	475
Gln Lys Lys Tyr Leu Glu Gln	Leu His Leu Pro Gln Ser Lys Pro Ile	
485	490	495
Ser Pro Asn Phe Lys Val Lys	Thr Ile Lys Leu Pro Thr Leu Asp His	
500	505	510
Thr Leu Asn Glu Thr Asp His	Ser Tyr Glu Ser His Lys Gln Gln Ser	
515	520	525
Glu Ile Asp Val Gln Thr Phe	Thr Lys Lys Gln Tyr Leu Lys Thr Lys	
530	535	540
Lys Thr Glu Ala Ser Thr Glu	Cys Ser His Lys Gln Ser Leu Ala Glu	

545	550	555	560
Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val Gln Leu			
565	570	575	
Pro Thr Glu Ser Ile Gln Lys Asn Gln Glu Asp Lys Leu Lys Met Val			
580	585	590	
Pro Arg Lys Gln Arg Glu Phe Ser Gly Ser Asp Arg Gly Lys Leu Pro			
595	600	605	
Gly Ser Glu Glu Lys Asn Gln Gly Pro Ser Met Ile Gly Arg Lys Glu			
610	615	620	
Glu Arg Leu Ile Thr Glu Arg Lys His Glu His Leu Lys Asn Lys Ser			
625	630	635	640
Ala Pro Lys Val Val Lys Gln Lys Val Ile Asp Ala His Leu Asp Ser			
645	650	655	
Gln Thr Gln Asn Phe Gln Gln Thr Gln Ile Gln Thr Ala Glu Ser Lys			
660	665	670	
Ala Glu His Lys Lys Leu Pro Gln Pro Tyr Asn Ser Leu Gln Glu Glu			
675	680	685	
Lys Cys Leu Glu Val Lys Gly Ile Gln Glu Lys Gln Val Phe Ser Asn			
690	695	700	
Thr Lys Asp Ser Lys Gln Glu Ile Thr Gln Asn Lys Ser Phe Phe Ser			
705	710	715	720
Ser Val Lys Glu Ser Gln Arg Asp Asp Gly Lys Gly Ala Leu Asn Ile			
725	730	735	
Val Glu Phe Leu Arg Lys Arg Glu Glu Leu Gln Gln Ile Leu Ser Arg			
740	745	750	
Val Lys Gln Phe Glu Ala Glu Pro Asn Lys Ser Gly Leu Lys Thr Phe			
755	760	765	
Gln Thr Leu Leu Asn Thr Ile Pro Gly Trp Leu Ile Ser Glu Asp Lys			
770	775	780	
Arg Glu Tyr Ala Val His Ile Ala Met Glu Asn Asn Leu Glu Lys Val			
785	790	795	800
Lys Glu Glu Ile Thr His Ile Lys Thr Gln Ala Glu Asp Met Leu Val			
805	810	815	
Ser Tyr Glu Asn Ile Ile Gln Thr Ala Met Met Ser Ser Lys Thr Gly			
820	825	830	
Lys Pro Gly Asn Lys Pro Thr Ser Leu Asp Glu Thr Ser Ser Lys Val			

835	840	845
Ser Asn Val His Val	Ser Asn Asn Lys Asn Ser	Glu Gln Lys
850	855	860

&lt;210&gt; 3352

&lt;211&gt; 198

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3352

Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp Val Val Gly Met Phe
1 5 10 15
Trp Asn Met Phe Phe Gln Val Ala Ser Gly Gly Gly Gly Val Gly Asp
20 25 30
Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met Leu Lys Thr
35 40 45
Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys Pro Ile Pro
50 55 60
Ile Met Pro Ala Ser Pro Gln Lys Lys Lys Lys Ile Lys Gln His Pro
65 70 75 80
Asp Arg Tyr Thr Tyr Ser Phe Arg Leu Thr Asp Leu Ser Cys Ile Tyr
85 90 95
Gly Val Val Met Arg Phe Arg Thr Tyr Thr Tyr Phe Val Lys Ile Pro
100 105 110
Gln Met Ile Leu Gly Met Asn Asp Tyr Ile Ile Asn Phe Lys Met Tyr
115 120 125
Leu Glu Ile Leu Lys Thr Ser Ser Pro Val Ser Asn Arg Gln His Ile
130 135 140
Tyr Ile Ala Asp Ile Thr Phe Phe Ser Val Tyr Asp Gln Val Phe Met
145 150 155 160
Lys Asp Tyr Trp Gln Gly Lys Tyr Glu Tyr Val Asn Phe Ser Leu Trp
165 170 175
His Gln Phe Thr Lys Glu Gln Gln Ala His Gln Leu Met Ser Asn Ile
180 185 190
Lys Thr Pro Thr Ser Val



195

&lt;210&gt; 3353

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3353

```

Met Cys Met Ile Asn Val Pro Leu Glu Gln Asp Asp Trp Asn Pro Gln
  1             5             10             15
Val Pro Ser Pro Thr Gln Leu Cys Pro Leu Ser Leu Pro Trp Pro Thr
          20             25             30
Gln Leu Leu Gln Gln Thr Pro Val Gly Leu His Trp Ser Arg Gln Gln
          35             40             45
Glu Gly Pro Gln Ala Leu Ser Tyr Trp Glu Ser Gly Asp Gly Thr Gly
          50             55             60
Thr Arg Leu Leu Arg Lys Glu Gly Ser Trp Pro Val Gln Asn Val Ala
          65             70             75             80
Asp Gly Pro Ala Trp Trp Leu Met Pro Val Val Leu Ala Leu Gly Glu
          85             90             95
Ala Glu Ala Asp Arg Ser Pro Glu Val Gly Ser Pro Thr Pro Ala Trp
          100            105            110
Pro Ala

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&lt;210&gt; 3354

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3354

```

Met Gly Phe Val Asn Ser Arg Lys Gly Thr Lys Phe Cys Leu Lys Arg
  1             5             10             15
Glu Gly Phe Ser Lys Gly Val Met Phe Asp Leu Arg Pro Arg Glu Gly

```

	20		25		30										
Glu	Arg	Lys	Glu	Ala	Cys	Arg	Gly	Ala	Leu	Val	Thr	Arg	Gly	Met	Leu
	35		40		45										
Tyr	Cys	Val	Asp	Ser	Arg	Asn	Arg	Gly	Glu	Ala	Leu	Ala	Leu	Ser	Leu
	50		55		60										
Ser	Ala	Phe	Trp	Phe	Met	Gln	Leu	Ser	Leu	Pro	Lys	Ile	Phe	Phe	Tyr
	65		70		75										80
Leu	Cys	Phe	Cys	Leu	Gln	Leu	Leu	Pro	Leu	Glu	Val	Ser	Leu	Ser	Phe
			85		90										95
Lys	Phe	Arg	Glu	Pro	Cys	Leu	Trp	His							
	100		105												

&lt;210&gt; 3355

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3355

Met	Pro	Leu	Asp	Lys	Met	Val	Asp	Leu	Ser	Gly	Ser	Gln	Leu	Arg	Arg
1				5					10					15	
Phe	Pro	Leu	His	Val	Cys	Ser	Phe	Arg	Glu	Leu	Val	Lys	Leu	Tyr	Leu
			20					25					30		
Ser	Asp	Asn	His	Leu	Asn	Ser	Leu	Pro	Pro	Glu	Leu	Gly	Gln	Leu	Gln
		35					40					45			
Asn	Leu	Gln	Ile	Leu	Ala	Leu	Asp	Phe	Asn	Asn	Phe	Lys	Ala	Leu	Pro
	50					55					60				
Gln	Val	Val	Cys	Thr	Leu	Lys	Gln	Leu	Cys	Ile	Leu	Tyr	Leu	Gly	Asn
	65				70				75						80
Asn	Lys	Leu	Cys	Asp	Leu	Pro	Ser	Glu	Leu	Ser	Leu	Leu	Gln	Asn	Leu
			85					90						95	
Arg	Thr	Leu	Trp	Ile	Glu	Ala	Asn	Cys	Leu	Thr	Gln	Leu	Pro	Asp	Val
		100					105						110		
Val	Cys	Glu	Leu	Ser	Leu	Leu	Lys	Thr	Leu	His	Ala	Gly	Ser	Asn	Ala
		115					120					125			
Leu	Arg	Leu	Leu	Pro	Gly	Gln	Leu	Arg	Arg	Leu	Gln	Glu	Leu	Arg	Thr

130	135	140	
Ile Trp Leu Ser Gly Asn Arg Leu Thr Asp Phe Pro Thr Val Leu Leu			
145	150	155	160
His Met Pro Phe Leu Glu Val Ile Asp Val Asp Trp Asn Ser Ile Arg			
	165	170	175
Tyr Phe Pro Ser Leu Ala His Leu Ser Ser Leu Lys Leu Val Ile Tyr			
	180	185	190
Asp His Asn Pro Cys Arg Asn Ala Pro Lys Val Ala Lys Gly Val Arg			
	195	200	205
Arg Val Gly Arg Trp Ala Glu Glu Thr Pro Glu Pro Asp Pro Arg Lys			
	210	215	220
Ala Arg Arg Tyr Ala Leu Val Arg Glu Glu Ser Gln Glu Leu Gln Ala			
225	230	235	240
Pro Val Pro Leu Leu Pro Pro Thr Asn Ser			
	245	250	

&lt;210&gt; 3356

&lt;211&gt; 106

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3356

Met Thr Ser Val Ala His Met Ser Thr Phe Arg Pro His Ile Cys His			
1	5	10	15
Leu Ser Lys Thr Ser Pro His Pro Leu Val Thr Arg Lys Arg Ala Ser			
	20	25	30
Ser Pro His Val Val Ile Val Leu Thr Ser Gly Leu Lys Gly Lys Ala			
	35	40	45
Ser Leu Arg Leu Arg Pro His Leu Pro Val Ile Phe His Pro Ile Pro			
	50	55	60
Leu Pro Arg Leu Leu Gly Leu Ser Ser Cys Ser Ile Pro Pro Phe Ala			
65	70	75	80
Val Ser Val Pro Pro Phe Pro Pro Gly Ser Ser Ser Ser Ala Met Cys			
	85	90	95
Ser Leu Pro Phe Leu Leu Lys Arg Lys Thr			

100

105

&lt;210&gt; 3357

&lt;211&gt; 214

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3357

```

Met Asn Asn Glu Thr Thr Thr Leu Ile Ser Leu Lys Glu Ala Met Lys
  1              5              10              15
Arg Val Asp His Lys Leu Gln Ala Leu Glu Thr Gln Phe Lys Glu Leu
      20              25              30
Asp Phe Thr Lys Asp Asn Leu Met Gln Lys Phe Glu His His Ser Lys
      35              40              45
Ala Leu Ala Ser Gln Ala Ala Gln Asp Glu Met Trp Thr Ala Val Arg
      50              55              60
Ala Leu Gln Leu Thr Ser Met Glu Leu Asn Ile Leu Tyr Ser Tyr Val
      65              70              75              80
Ile Glu Val Leu Ile Cys Leu His Thr Arg Val Leu Glu Lys Leu Pro
      85              90              95
Asp Leu Val Arg Gly Leu Pro Thr Leu Ala Ser Val Leu Arg Arg Lys
      100             105             110
Val Lys Asn Lys Arg Val Arg Val Val Trp Glu Ser Ile Leu Glu Glu
      115             120             125
Cys Gly Leu Gln Glu Gly Asp Ile Thr Ala Leu Cys Thr Phe Phe Ile
      130             135             140
Ala Arg Gly Asn Lys Ala Glu His Tyr Thr Ala Lys Val Arg Gln Met
      145             150             155             160
Tyr Ile Arg Asp Val Thr Phe Leu Ile Thr Asn Met Val Lys Asn Gln
      165             170             175
Ala Leu Gln Asp Ser Leu Leu Arg Ala Val Gln Val Ile Glu Lys Gly
      180             185             190
Lys Ala Val Arg Thr Pro Glu Lys Gln Lys Ser Ser Leu Glu Glu Leu
      195             200             205

```

Ile Pro Ser Val Lys Asn

210

<210> 3358

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3358

Met Gln Met Gly Asp Glu Phe Leu His Thr Leu Val Phe Leu Pro Phe

1

5

10

15

Val Asn Leu Thr Thr Asn Val Leu Ser Tyr Arg Lys Met Cys Val Arg

20

25

30

Val Cys Met Ser Glu Cys Val Arg Val Cys Val Cys Ala Cys Cys Lys

35

40

45

Asn Met Leu Glu Cys Glu Cys Gly Val Cys Leu His Val Cys Met Cys

50

55

60

Glu Cys Met His Ala Arg Val Cys Lys Ser Val His Val His Val Cys

65

70

75

80

Glu Thr Thr Gly Met Arg Tyr Val Arg Met Ser Val Cys Thr Cys Val

85

90

95

Ser Met Cys Ile Val Tyr Asn Val His Glu Tyr Ser Val Arg Ala

100

105

110

<210> 3359

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3359

Met Gly Lys Arg Asp Asn Arg Val Ala Tyr Met Asn Pro Ile Ala Met

1

5

10

15

Ala Arg Ser Arg Gly Pro Ile Gln Ser Ser Gly Pro Thr Ile Gln Asp

20

25

30

Tyr	Leu	Asn	Arg	Pro	Arg	Pro	Thr	Trp	Glu	Glu	Val	Lys	Glu	Gln	Leu
35				40				45							
Glu	Lys	Lys	Lys	Lys	Gly	Ser	Lys	Ala	Leu	Ala	Glu	Phe	Glu	Glu	Lys
50				55				60							
Met	Asn	Glu	Asn	Trp	Lys	Lys	Glu	Leu	Glu	Lys	His	Arg	Glu	Lys	Leu
65				70				75				80			
Leu	Ser	Gly	Ser	Glu	Ser	Ser	Ser	Lys	Lys	Arg	Gln	Arg	Lys	Lys	Lys
85				90				95							
Glu	Lys	Lys	Lys	Ser	Gly	Arg	Val	Ser	Lys	Asn	Phe	Pro	Phe	Phe	
100				105				110							

&lt;210&gt; 3360

&lt;211&gt; 290

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Ala	Leu	Ala	Ser	Thr	Glu	Lys	Met	Leu	Gln	Asp	Lys	Val	Asn
1				5					10					15	
Lys	Thr	Ser	Lys	Glu	Arg	Gln	Gln	Gln	Val	Glu	Ala	Val	Glu	Leu	Glu
			20					25					30		
Ala	Lys	Glu	Val	Leu	Lys	Lys	Leu	Phe	Pro	Lys	Val	Ser	Val	Pro	Ser
		35					40					45			
Asn	Leu	Ser	Tyr	Gly	Glu	Trp	Leu	His	Gly	Phe	Glu	Lys	Lys	Ala	Lys
	50					55					60				
Glu	Cys	Met	Ala	Gly	Thr	Ser	Gly	Ser	Glu	Glu	Val	Lys	Val	Leu	Glu
65				70						75				80	
His	Lys	Leu	Lys	Glu	Ala	Asp	Glu	Met	His	Thr	Leu	Leu	Gln	Leu	Glu
			85						90					95	
Cys	Glu	Lys	Tyr	Lys	Ser	Val	Leu	Ala	Glu	Thr	Glu	Gly	Ile	Leu	Gln
		100						105				110			
Lys	Leu	Gln	Arg	Ser	Val	Glu	Gln	Glu	Glu	Asn	Lys	Trp	Lys	Val	Lys
		115					120					125			
Val	Asp	Glu	Ser	His	Lys	Thr	Ile	Lys	Gln	Met	Gln	Ser	Ser	Phe	Thr
	130					135					140				

Ser Ser Glu Gln Glu Leu Glu Arg Leu Arg Ser Glu Asn Lys Asp Ile  
 145                      150                      155                      160  
 Glu Asn Leu Arg Arg Glu Arg Glu His Leu Glu Met Glu Leu Gly Lys  
                          165                      170                      175  
 Ala Glu Met Glu Arg Ser Thr Tyr Val Thr Glu Val Arg Glu Leu Lys  
                          180                      185                      190  
 Ala Gln Leu Asn Glu Thr Leu Thr Lys Leu Arg Thr Glu Gln Asn Glu  
                          195                      200                      205  
 Arg Gln Lys Val Ala Gly Asp Leu His Lys Ala Gln Gln Ser Leu Glu  
                          210                      215                      220  
 Leu Ile Gln Ser Lys Ile Val Lys Ala Ala Gly Asp Thr Thr Val Ile  
 225                      230                      235                      240  
 Glu Asn Ser Asp Val Ser Pro Glu Thr Glu Ser Ser Glu Lys Glu Thr  
                          245                      250                      255  
 Met Ser Val Ser Leu Asn Gln Thr Val Thr Gln Leu Gln Gln Leu Leu  
                          260                      265                      270  
 Gln Ala Val Asn Gln Gln Leu Thr Lys Glu Lys Glu His Tyr Gln Val  
                          275                      280                      285  
 Leu Glu  
                          290

<210> 3361

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3361

Met Ala Ala Ala Arg Thr Pro Pro Gly Gln Gln Pro Arg Leu Thr Ser  
   1                      5                      10                      15  
 Pro Pro Pro Pro Ser Ile Ser Pro Ala Ala Trp Arg Trp Glu Ala Ala  
                          20                      25                      30  
 Pro Arg Gly His Gly Pro Ser Pro Lys Ala His Thr Pro Ala Phe Arg  
                          35                      40                      45  
 Arg His Pro Pro Leu Thr Thr Ala Arg Glu Val Ala Arg Val Arg Thr

50                      55                      60  
 Leu His Pro Gln Asp Val Ala Leu Ala Gly Pro Pro Gly Ser Gly Cys  
 65                      70                      75                      80  
 Leu Arg Trp Val Trp Asp Leu Ser Cys Gly Val Phe Asp Gly Gly Trp  
                     85                      90                      95  
 Leu Gly Arg Glu Ala Ser Ser Val Gly Arg Gly Pro Arg Gly Pro Gly  
                     100                      105                      110  
 Ala Ala Val Val Lys Met Arg Arg His Gly Gly Arg Gly Lys Ala Pro  
                     115                      120                      125  
 Leu Pro Ser Ser Thr Pro Ala Pro Gly Asp Cys Phe Leu Tyr  
                     130                      135                      140

<210> 3362

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3362

Met Leu Arg Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp  
 1                      5                      10                      15  
 Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro  
                     20                      25                      30  
 Met Ala His Cys Ala Asn Ser Arg Leu Val Cys Lys Ile Ser Gly Asp  
                     35                      40                      45  
 Val Met Asn Glu Asn Asn Pro Pro Met Met Leu Pro Asn Gly Tyr Val  
                     50                      55                      60  
 Tyr Gly Tyr Asn Val Arg Gly Ala Gly Gln Gly Gly Gln Ala Gly Thr  
 65                      70                      75                      80  
 His Arg His Arg Asp Arg Ala Val Trp Asp Gly Gln Gly Arg Gly Ala  
                     85                      90                      95  
 Arg Leu Ala Arg Ile Ala Ile Gly Thr Gly Leu Cys Gly Thr Gly Arg  
                     100                      105                      110  
 Ala Gly Gly Gln Ala Gly Thr Arg Arg His Arg Asp Arg Ala Val Trp  
                     115                      120                      125  
 Gly Gly Gln Gly Ser Gly Ala Arg Leu Ala His Val Ala Ile Gly Thr



130 135 140  
 Gly Leu Ser Ser Arg Pro Thr Leu Pro  
 145 150

<210> 3363

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3363

Met Ser Met Lys Leu Ser Val Thr Cys Glu Ser Ala Val Pro Met Ser  
 1 5 10 15  
 Ile Tyr Val Leu Asn Leu Leu Leu Phe Gln Lys Arg Gly Leu Ala His  
 20 25 30  
 Gln Leu Glu Glu Tyr Leu Leu Lys Trp Arg Arg Asn Lys Ala Thr Lys  
 35 40 45  
 Val Ala Lys Ile Ser Ser Glu Gln Lys Lys Ile Leu Arg Arg Lys Met  
 50 55 60  
 Val Leu Gln Leu Val Leu Gln Gly Leu Ala Thr Cys Val Ser His Ser  
 65 70 75 80  
 Arg Ala Ala Asn His Gly Val Gly Pro Ser His Phe Ala Gln Gly Gly  
 85 90 95  
 Leu Arg Ser Ser Gly Lys Val Leu Leu Gln Val Thr Asp Tyr Arg Cys  
 100 105 110  
 Val Val Glu Gly Gln Ala  
 115

<210> 3364

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3364

Met Trp Ser Leu Pro His Pro Thr Trp Thr Leu Asp Ser Thr Cys Tyr

1	5	10	15
Ala Ala Ala Pro Ala Trp Ala Ser Phe Ser Pro Arg Thr Asp Ser Asp			
20	25	30	
Ile Pro His Cys Ser Thr Thr Leu His Gly His Pro Pro His Pro Ala			
35	40	45	
Trp Ala Leu Thr Pro Tyr Ser Arg Pro Pro Pro Ala Met Ser Gly His			
50	55	60	
Pro Pro His Pro Ser Trp Ala Cys Lys Leu His Ile Thr Cys Pro His			
65	70	75	80
Ala Trp Ile Pro Phe Ser Pro His Met Ala Ser Asp Thr Pro Pro Trp			
85	90	95	
Thr Ala Ile Leu Gln Gly Ser Thr Ser Ser Pro Ala Gln Ala Cys Trp			
100	105	110	
Pro Pro Ala Trp Met Leu Phe Phe Thr Gly Pro Ala Leu Thr Pro Pro			
115	120	125	
Gly Ala Ser Cys Ala Gly Val Phe Leu Thr Leu Leu Gly Leu			
130	135	140	

&lt;210&gt; 3365

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3365

Met Asp Pro Val Ala Ser Ser Ser Ile Arg Pro Glu Pro Asp Ser His			
1	5	10	15
Tyr Leu Gln Phe Gln Thr Gln Pro His Val Leu Trp Asn Arg Leu Pro			
20	25	30	
Glu Ala Trp Asp Arg Ser Glu Ser Leu Asp Ser Ser Trp Gly Gly Trp			
35	40	45	
Val Gly Val Arg Gly Arg Val Pro Glu Gly Pro His Ser Thr Leu Ser			
50	55	60	
Trp Ser Ala Gly Gln Gln Glu Glu Gln Ala Trp Gly Trp Leu Trp Ser			
65	70	75	80
Leu Pro Pro Arg Ser Glu Ala Val Arg Gln Glu Lys Gly Glu Lys Glu			

	85		90		95										
Pro	Ser	Phe	Leu	Glu	Ser	Asp	Ser	Asp	Pro	Ser	Arg	His	Ser	Gln	Leu
	100		105		110										
Val	Ser	Gly	Asp	Leu	Ser	Leu	Thr	His							
	115		120												

&lt;210&gt; 3366

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3366

Met	Pro	Gln	Thr	Lys	Asp	Glu	Gly	Gly	Gly	Arg	Trp	Gly	Val	Gly	Gly
1				5					10					15	
Leu	Ser	Asn	Lys	Val	Trp	Cys	Cys	Arg	Thr	Phe	Ser	Phe	Phe	Phe	Phe
			20					25					30		
Phe	Phe	Phe	Phe	Phe	Leu	Phe	Phe	Phe	Phe	Phe	Phe	Val	Val	Val	Val
			35				40					45			
Val	Val	Val	Phe	Val	Phe	Ile	Phe	Phe	Phe	Leu	Leu	Ser	Ser	Ser	Phe
			50				55				60				
Phe	Leu	Leu	Pro	Ser	Ser	Ser	Phe	Phe	Leu	Leu	Leu	Val	Ser	Leu	Cys
			65			70				75				80	
Tyr	Pro	Ala	Trp	Ser	Ala	Leu	Arg	Gln	Ser	Gln	Leu	Thr	Ala	Thr	Ser
				85					90					95	
Thr	Cys	Gln	Val												
			100												

&lt;210&gt; 3367

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3367

Met	Arg	Val	Leu	Ser	Arg	Gly	Gly	Phe	Gln	Arg	Val	Lys	Gly	Arg	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

1	5	10	15												
Leu	Pro	Gln	Leu	Met	Pro	Gln	Ser	Ala	Ala	Pro	Gln	Val	Ala	Glu	Glu
	20		25									30			
Gly	Leu	Phe	Pro	Gly	Met	Ile	Leu	Gln	Thr	Asn	Ile	Lys	Ala	Ile	Val
	35					40						45			
Pro	Leu	Gly	Leu	Cys	Leu	Gly	Arg	Leu	Lys	Leu	Arg	Lys	Leu	Pro	Lys
	50					55						60			
Val	Ala	Val	Leu	Met	Ser	Ala	Ala	Leu	Lys	Pro	Lys	Asp	Met	Gln	Phe
65					70					75				80	
Phe	Phe	Phe	Phe	Phe	Glu	Met	Glu	Ser	Cys	Pro	Val	Ala	Arg	Leu	Glu
				85						90				95	
Cys	Ser	Gly	Val	Ile	Leu	Ala	His	Cys	Asn	Leu	Arg	Leu	Pro	Gly	Ser
	100								105				110		
Ser	Asp	Ser	Ser	Ala	Ser	Ala	Ser	Gln	Val	Ala	Gly	Ile	Thr	Gly	Thr
	115							120					125		
Cys	His	Tyr	Thr	Gln	Ile	Val	Phe	Val	Phe	Leu	Val	Glu	Met	Gly	Phe
	130					135						140			
His	His	Val	Gly	Gln	Asp	Gly	Leu	Asp	Leu	Leu	Thr	Leu			
145					150						155				

&lt;210&gt; 3368

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3368

Met	Asn	Pro	Ser	Glu	Met	Gln	Gly	Lys	Ala	Pro	Pro	Gln	Arg	Gln	Arg
1					5							10			15
Thr	Arg	Asn	Arg	Thr	Ser	Leu	Thr	Arg	Arg	Val	Asn	Lys	Met	Val	Ile
			20					25					30		
Ser	Glu	Glu	Gln	Met	Lys	Leu	Pro	Ser	Thr	Lys	Lys	Ala	Gly	Pro	Pro
		35						40					45		
Thr	Trp	Ala	Gln	Leu	Lys	Lys	Leu	Thr	Gln	Leu	Ala	Glu	Lys	Ser	Leu
	50							55							60

Glu Asn Thr Arg Val Thr Gln Thr Pro Glu Asn Lys Leu Leu Ala Ala  
 65 70 75 80  
 Leu Met Ile Val Ser Thr Val Val Ser Leu Pro Met Ser Ala Gly Ala  
 85 90 95  
 Ala Thr Ala Asn Tyr Thr Tyr Trp Ala Tyr Val Pro Phe Pro Pro Leu  
 100 105 110  
 Ile Arg Ala Val Thr Trp Ile Asp Asn Pro Ile Glu Val Tyr Val Asn  
 115 120 125  
 Asn Ser Ala Trp Val Pro Gly Pro Thr Asp Asp Arg Gly Pro Ala Gln  
 130 135 140  
 Pro Glu Glu Glu Gly Met Met Ile Asn Ile Ser Ile Gly Tyr His Tyr  
 145 150 155 160  
 Pro Ser Ile Cys Leu Gly Lys Thr Pro Gly Cys Leu Met Pro Thr Ile  
 165 170 175  
 Gln Asn Trp Leu Val Glu Glu Pro Thr Val Ser Ala Thr Ser Lys Phe  
 180 185 190  
 Thr Tyr His Met Ile Ser Gly Met Ser Leu Gly Ser Gln Met Asn Asn  
 195 200 205  
 Leu Gln Asn Ser Ser Tyr Gln Arg Ser Leu Lys Phe Arg Pro Lys Trp  
 210 215 220  
 Lys Pro Cys Gln Lys Glu Ile Pro Glu Glu Ser Lys Asp Pro Glu Val  
 225 230 235 240  
 Leu Val Trp Glu Glu Cys Val Ala Asp Thr Ala Val Val Leu Gln Asn  
 245 250 255  
 Asn Lys Phe Arg Ile Ile Ile Asp Trp Ala Pro Arg Gly Gln Leu Tyr  
 260 265 270  
 Tyr Asp Cys Met Gly Gln Thr His Ser Cys Ser Gln Ala Pro Ser Val  
 275 280 285  
 Trp Pro Thr Asn Leu Ala Tyr Asp Gly Asp Leu Thr Lys Arg Leu Asp  
 290 295 300  
 Gln Val Tyr Arg Arg Leu Glu Ser Pro Tyr Ser Trp Lys Trp Gly Glu  
 305 310 315 320  
 Lys Gly Ile Pro Ser Pro Arg Pro Lys Leu Val Ser Pro Val Val Gly  
 325 330 335  
 Pro Glu His Pro Glu Leu  
 340

&lt;210&gt; 3369

&lt;211&gt; 377

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3369

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Met Pro Arg Arg Leu Gln Pro Arg Gly Ala Gly Thr Lys Gly Pro Pro
 1             5             10             15
Ala Pro Ala Pro Ala Ala Ser Gly Ala Ala Arg Asn Ser His Ser Ala
      20             25             30
Ala Ser Arg Asp Pro Pro Ala Ser Ala Lys Pro Leu Leu Arg Trp Asp
      35             40             45
Glu Val Pro Asp Asp Phe Val Glu Cys Phe Ile Leu Ser Gly Tyr Arg
      50             55             60
Arg Leu Pro Cys Thr Ala Gln Glu Cys Leu Ala Ser Val Leu Lys Pro
      65             70             75             80
Thr Asn Glu Thr Leu Asn Phe Trp Thr His Phe Ile Pro Leu Leu Leu
      85             90             95
Phe Leu Ser Lys Phe Cys Arg Leu Phe Phe Leu Ser Gly Gly Asp Val
      100            105            110
Pro Phe His His Pro Trp Leu Leu Pro Leu Trp Cys Tyr Ala Ser Gly
      115            120            125
Val Leu Leu Thr Phe Ala Met Ser Cys Thr Ala His Val Phe Ser Cys
      130            135            140
Leu Ser Leu Arg Leu Arg Ala Ala Phe Phe Tyr Leu Asp Tyr Ala Ser
      145            150            155            160
Ile Ser Tyr Tyr Gly Phe Gly Ser Thr Val Ala Tyr Tyr Tyr Tyr Leu
      165            170            175
Leu Pro Gly Leu Ser Leu Leu Asp Ala Arg Val Met Thr Pro Tyr Leu
      180            185            190
Gln Gln Arg Leu Gly Trp His Val Asp Cys Thr Arg Leu Ile Ala Ala
      195            200            205
Tyr Arg Ala Leu Val Leu Pro Val Ala Phe Val Leu Ala Val Ala Cys
      210            215            220

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&lt;211&gt; 193

<213> Homo sapiens

Met	Pro	Ala	Ser	Ser	Leu	Leu	Ser	Ile	Leu	Pro	Pro	Arg	Tyr	Ile	Ser
1				5					10					15	
Asn	Leu	Pro	Thr	Phe	Leu	Glu	Leu	His	Ile	Thr	Asp	Leu	Val	Gln	Ala
			20					25					30		
Ile	Ile	Ile	Ser	Leu	Leu	Gly	Pro	Thr	Lys	Thr	Leu	Ile	Thr	Val	Leu
		35					40					45			
Phe	Val	Ser	Phe	Cys	Leu	Phe	Leu	Arg	Gln	Ser	Leu	Ile	Leu	Ile	Thr
	50					55					60				

[illegible]

&lt;210&gt; 3371

&lt;211&gt; 124

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3371

Met	Phe	Arg	Lys	Thr	Thr	Ser	Phe	Phe	Phe	Phe	Phe	Trp	Arg	Gln	Gly
1				5				10						15	
Leu	Ala	Leu	Ser	Pro	Arg	Leu	Gly	Cys	Ser	Gly	Val	Ile	Leu	Ala	His
			20					25						30	
Cys	Asn	Leu	Arg	Leu	Pro	Gly	Ser	Ser	Asp	Ser	Pro	Ala	Ser	Ala	Ser
			35					40						45	
Gly	Val	Ala	Gly	Ile	Thr	Gly	Ile	Cys	Asp	His	Ala	Arg	Leu	Ile	Phe
			50					55						60	
Val	Phe	Ser	Val	Glu	Thr	Gly	Phe	His	His	Val	Gly	Gln	Ala	Gly	Leu
65					70						75				80



Glu	Leu	Leu	Thr	Ser	Gly	Asp	Pro	Pro	Ala	Trp	Ala	Ser	Gln	Ser	Ala
				85					90					95	
Gln	Ile	Thr	Gly	Val	Ser	His	Arg	Ala	Gln	Ser	Glu	Asn	Tyr	Leu	Tyr
			100					105					110		
Tyr	Cys	Ser	Cys	Ile	Leu	Lys	Asn	Ser	Leu	Arg	Pro				
			115					120							

&lt;210&gt; 3372

&lt;211&gt; 515

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3372

Met	Leu	Met	His	Trp	Gly	Trp	Phe	Leu	Glu	His	Asp	Leu	Asp	His	Thr
1				5				10						15	
Val	Pro	Ala	Leu	Ser	Thr	Ala	Arg	Phe	Ser	Asp	Gly	Arg	Pro	Cys	Asn
			20					25					30		
Ser	Val	Cys	Thr	Asn	Asp	Pro	Pro	Cys	Phe	Pro	Met	Asn	Thr	Arg	His
		35						40				45			
Ala	Asp	Pro	Arg	Gly	Thr	His	Ala	Pro	Cys	Met	Leu	Phe	Ala	Arg	Ser
	50						55				60				
Ser	Pro	Ala	Cys	Ala	Ser	Gly	Arg	Pro	Ser	Ala	Thr	Val	Asp	Ser	Val
65					70					75					80
Tyr	Ala	Arg	Glu	Gln	Ile	Asn	Gln	Gln	Thr	Ala	Tyr	Ile	Asp	Gly	Ser
			85						90					95	
Asn	Val	Tyr	Gly	Ser	Ser	Glu	Arg	Glu	Ser	Gln	Ala	Leu	Arg	Asp	Pro
		100						105				110			
Ser	Val	Pro	Arg	Gly	Leu	Leu	Lys	Thr	Gly	Phe	Pro	Trp	Pro	Pro	Ser
		115						120				125			
Gly	Lys	Pro	Leu	Leu	Pro	Phe	Ser	Thr	Gly	Pro	Pro	Thr	Glu	Cys	Ala
	130						135					140			
Arg	Gln	Glu	Gln	Glu	Ser	Pro	Cys	Phe	Leu	Ala	Gly	Asp	His	Arg	Ala
145					150					155					160
Asn	Glu	His	Leu	Ala	Leu	Ala	Ala	Met	His	Thr	Leu	Trp	Phe	Arg	Glu
			165						170					175	

His Asn Arg Val Ala Thr Glu Leu Ser Ala Leu Asn Pro His Trp Glu  
 180 185 190  
 Gly Asn Thr Val Tyr Gln Glu Ala Arg Lys Ile Val Gly Ala Glu Leu  
 195 200 205  
 Gln His Ile Thr Tyr Ser His Trp Leu Pro Lys Val Leu Gly Asp Pro  
 210 215 220  
 Gly Thr Arg Met Leu Arg Gly Tyr Arg Gly Tyr Asn Pro Asn Val Asn  
 225 230 235 240  
 Ala Gly Ile Ile Asn Ser Phe Ala Thr Ala Ala Phe Arg Phe Gly His  
 245 250 255  
 Thr Leu Ile Asn Pro Ile Leu Tyr Arg Leu Asn Ala Thr Leu Gly Glu  
 260 265 270  
 Ile Ser Glu Gly His Leu Pro Phe His Lys Ala Leu Phe Ser Pro Ser  
 275 280 285  
 Arg Ile Ile Lys Glu Gly Gly Ile Asp Pro Val Leu Arg Gly Leu Phe  
 290 295 300  
 Gly Val Ala Ala Lys Trp Arg Ala Pro Ser Tyr Leu Leu Ser Pro Glu  
 305 310 315 320  
 Leu Thr Gln Arg Leu Phe Ser Ala Ala Tyr Ser Ala Ala Val Asp Ser  
 325 330 335  
 Ala Ala Thr Ile Ile Gln Arg Gly Arg Asp His Gly Ile Pro Pro Tyr  
 340 345 350  
 Val Asp Phe Arg Val Phe Cys Asn Leu Thr Ser Val Lys Asn Phe Glu  
 355 360 365  
 Asp Leu Gln Asn Glu Ile Lys Asp Ser Glu Ile Arg Gln Lys Leu Arg  
 370 375 380  
 Lys Leu Tyr Gly Ser Pro Gly Asp Ile Asp Leu Trp Pro Ala Leu Met  
 385 390 395 400  
 Val Glu Asp Leu Ile Pro Gly Thr Arg Val Gly Pro Thr Leu Met Cys  
 405 410 415  
 Leu Phe Val Thr Gln Phe Gln Arg Leu Arg Asp Gly Asp Arg Phe Trp  
 420 425 430  
 Tyr Glu Asn Pro Gly Val Phe Thr Pro Ala Gln Leu Thr Gln Leu Lys  
 435 440 445  
 Gln Ala Ser Leu Ser Arg Val Leu Cys Asp Asn Gly Asp Ser Ile Gln  
 450 455 460

Gln Val Gln Ala Asp Val Phe Val Lys Ala Glu Tyr Pro Gln Asp Tyr  
 465 470 475 480  
 Leu Asn Cys Ser Glu Ile Pro Lys Val Asp Leu Arg Val Trp Gln Asp  
 485 490 495  
 Cys Cys Ala Asp Lys Gln Ala Gly Gly Thr Pro Glu Ala Gly Arg Val  
 500 505 510  
 Tyr Arg Cys  
 515

<210> 3373

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3373

Met Trp Thr Glu Trp Gly Pro Val Gly Gly Pro Ser Ala Ala Pro Tyr  
 1 5 10 15  
 Gly Gln Asp Pro His Arg Leu Gly Cys Ser Gly Pro Gln Val Ala Leu  
 20 25 30  
 Val Trp Gly Glu Lys Ala Gln Gln Ala Glu Pro Gly Phe Leu Pro His  
 35 40 45  
 Pro His Ile Pro Val Tyr Leu Leu Asp Leu Gln Pro Gln Ile Pro Gly  
 50 55 60  
 Pro Leu Thr Trp Leu Arg Asn Arg Val Arg Ala Gly Val Leu Ser Arg  
 65 70 75 80  
 Gly Trp Ala Arg Glu Pro Gly Ser Gly Arg Gln Ser Trp Cys Pro Gly  
 85 90 95  
 Gly Gly Gly Pro Gly Arg Leu His Trp Glu Pro Ala Pro Gly Trp Gly  
 100 105 110  
 Val Pro Gln Ala Tyr Arg Glu Gln Thr Leu Leu Leu Arg Arg Gly Gly  
 115 120 125  
 Leu Gln Pro Ala Val Leu Ser Leu Arg Val Leu His Leu Leu Asp Ala  
 130 135 140  
 Gly Thr Gln Gln Leu Ile Leu Glu Gln Gly Arg Val Gly Gln Ala Val  
 145 150 155 160

Cys Gly His Gln Ala Gln

165

<210> 3374

<211> 868

<212> PRT

<213> Homo sapiens

<400> 3374

Met	Trp	Pro	Arg	Leu	Ala	Phe	Cys	Cys	Trp	Gly	Leu	Ala	Leu	Val	Ser
1				5					10				15		
Gly	Trp	Ala	Thr	Phe	Gln	Gln	Met	Ser	Pro	Ser	Arg	Asn	Phe	Ser	Phe
			20					25					30		
Arg	Leu	Phe	Pro	Glu	Thr	Ala	Pro	Gly	Ala	Pro	Gly	Ser	Ile	Pro	Ala
		35					40					45			
Pro	Pro	Ala	Pro	Gly	Asp	Glu	Ala	Ala	Gly	Ser	Arg	Val	Glu	Arg	Leu
	50					55					60				
Gly	Gln	Ala	Phe	Arg	Arg	Arg	Val	Arg	Leu	Leu	Arg	Glu	Leu	Ser	Glu
65				70					75					80	
Arg	Leu	Glu	Leu	Val	Phe	Leu	Val	Asp	Asp	Ser	Ser	Ser	Val	Gly	Glu
			85						90					95	
Val	Asn	Phe	Arg	Ser	Glu	Leu	Met	Phe	Val	Arg	Lys	Leu	Leu	Ser	Asp
		100							105					110	
Phe	Pro	Val	Val	Pro	Thr	Ala	Thr	Arg	Val	Ala	Ile	Val	Thr	Phe	Ser
		115					120						125		
Ser	Lys	Asn	Tyr	Val	Val	Pro	Arg	Val	Asp	Tyr	Ile	Ser	Thr	Arg	Arg
	130					135					140				
Ala	Arg	Gln	His	Lys	Cys	Ala	Leu	Leu	Leu	Gln	Glu	Ile	Pro	Ala	Ile
145				150						155				160	
Ser	Tyr	Arg	Gly	Gly	Gly	Thr	Tyr	Thr	Lys	Gly	Ala	Phe	Gln	Gln	Ala
			165						170					175	
Ala	Gln	Ile	Leu	Leu	His	Ala	Arg	Glu	Asn	Ser	Thr	Lys	Val	Val	Phe
		180							185					190	
Leu	Ile	Thr	Asp	Gly	Tyr	Ser	Asn	Gly	Gly	Asp	Pro	Arg	Pro	Ile	Ala
		195						200						205	

Ala Ser Leu Arg Asp Ser Gly Val Glu Ile Phe Thr Phe Gly Ile Trp  
 210 215 220  
 Gln Gly Asn Ile Arg Glu Leu Asn Asp Met Ala Ser Thr Pro Lys Glu  
 225 230 235 240  
 Glu His Cys Tyr Leu Leu His Ser Phe Glu Glu Phe Glu Ala Leu Ala  
 245 250 255  
 Arg Arg Ala Leu His Glu Asp Leu Pro Ser Gly Ser Phe Ile Gln Asp  
 260 265 270  
 Asp Met Val His Cys Ser Tyr Leu Cys Asp Glu Gly Lys Asp Cys Cys  
 275 280 285  
 Asp Arg Met Gly Ser Cys Lys Cys Gly Thr His Thr Gly His Phe Glu  
 290 295 300  
 Cys Ile Cys Glu Lys Gly Tyr Tyr Gly Lys Gly Leu Gln Tyr Glu Cys  
 305 310 315 320  
 Thr Ala Cys Pro Ser Gly Thr Tyr Lys Pro Glu Gly Ser Pro Gly Gly  
 325 330 335  
 Ile Ser Ser Cys Ile Pro Cys Pro Asp Glu Asn His Thr Ser Pro Pro  
 340 345 350  
 Gly Ser Thr Ser Pro Glu Asp Cys Val Cys Arg Glu Gly Tyr Arg Ala  
 355 360 365  
 Ser Gly Gln Thr Cys Glu Leu Val His Cys Pro Ala Leu Lys Pro Pro  
 370 375 380  
 Glu Asn Gly Tyr Phe Ile Gln Asn Thr Cys Asn Asn His Phe Asn Ala  
 385 390 395 400  
 Ala Cys Gly Val Arg Cys His Pro Gly Phe Asp Leu Val Gly Ser Ser  
 405 410 415  
 Ile Ile Leu Cys Leu Pro Asn Gly Leu Trp Ser Gly Ser Glu Ser Tyr  
 420 425 430  
 Cys Arg Val Arg Thr Cys Pro His Leu Arg Gln Pro Lys His Gly His  
 435 440 445  
 Ile Ser Cys Ser Thr Arg Glu Met Leu Tyr Lys Thr Thr Cys Leu Val  
 450 455 460  
 Ala Cys Asp Glu Gly Tyr Arg Leu Glu Gly Ser Asp Lys Leu Thr Cys  
 465 470 475 480  
 Gln Gly Asn Ser Gln Trp Asp Gly Pro Glu Pro Arg Cys Val Glu Arg  
 485 490 495

His Cys Ser Thr Phe Gln Met Pro Lys Asp Val Ile Ile Ser Pro His  
 500 505 510  
 Asn Cys Gly Lys Gln Pro Ala Lys Phe Gly Thr Ile Cys Tyr Val Ser  
 515 520 525  
 Cys Arg Gln Gly Phe Ile Leu Ser Gly Val Lys Glu Met Leu Arg Cys  
 530 535 540  
 Thr Thr Ser Gly Lys Trp Asn Val Gly Val Gln Ala Ala Val Cys Lys  
 545 550 555 560  
 Asp Val Glu Ala Pro Gln Ile Asn Cys Pro Lys Asp Ile Glu Ala Lys  
 565 570 575  
 Ala Leu Glu Gln Gln Asp Ser Ala Asn Val Thr Trp Gln Ile Pro Thr  
 580 585 590  
 Ala Lys Asp Asn Ser Gly Glu Lys Val Ser Val His Val His Pro Ala  
 595 600 605  
 Phe Thr Pro Pro Tyr Leu Phe Pro Ile Gly Asp Val Ala Ile Val Tyr  
 610 615 620  
 Thr Ala Thr Asp Leu Ser Gly Asn Gln Ala Ser Cys Ile Phe His Ile  
 625 630 635 640  
 Lys Val Ile Asp Ala Glu Pro Pro Val Ile Asp Trp Cys Arg Ser Pro  
 645 650 655  
 Pro Pro Val Gln Val Ser Glu Lys Val His Ala Ala Ser Trp Asp Glu  
 660 665 670  
 Pro Gln Phe Ser Asp Asn Ser Gly Ala Glu Leu Val Ile Thr Arg Ser  
 675 680 685  
 His Thr Gln Gly Asp Leu Phe Pro Gln Gly Glu Thr Ile Val Gln Tyr  
 690 / 695 700  
 Thr Ala Thr Asp Pro Ser Gly Asn Asn Arg Thr Cys Asp Ile His Ile  
 705 710 715 720  
 Val Ile Lys Gly Ser Pro Cys Glu Ile Pro Phe Thr Pro Val Asn Gly  
 725 730 735  
 Asp Phe Ile Cys Thr Pro Asp Asn Thr Gly Val Asn Cys Thr Leu Thr  
 740 745 750  
 Cys Leu Glu Gly Tyr Asp Phe Thr Glu Gly Ser Thr Asp Lys Tyr Tyr  
 755 760 765  
 Cys Ala Tyr Glu Asp Gly Val Trp Lys Pro Thr Tyr Thr Thr Glu Trp

770                      775                      780  
 Pro Asp Cys Ala Lys Lys Arg Phe Ala Asn His Gly Phe Lys Ser Phe  
 785                      790                      795                      800  
 Glu Met Phe Tyr Lys Ala Ala Arg Cys Asp Asp Thr Asp Leu Met Lys  
                     805                      810                      815  
 Lys Phe Ser Glu Ala Phe Glu Thr Thr Leu Gly Lys Met Val Pro Ser  
                     820                      825                      830  
 Phe Cys Ser Asp Ala Glu Asp Ile Asp Cys Arg Leu Glu Glu Asn Leu  
                     835                      840                      845  
 Thr Lys Lys Tyr Cys Leu Glu Tyr Asn Tyr Asp Tyr Glu Asn Gly Phe  
                     850                      855                      860  
 Ala Ile Gly Asn  
 865

<210> 3375

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3375

Met Ser Val Pro His Ala His Thr Gln Ser Cys Asn Asp Asn Gly Lys  
   1                      5                      10                      15  
 Lys Cys Leu Leu Thr Leu Pro Asn Val Pro Ser Gly Gly Lys Leu Pro  
                     20                      25                      30  
 Leu Val Glu Asn His Cys Ser Ile Pro Phe His Gln Leu Arg Asp Pro  
                     35                      40                      45  
 Pro Pro Ser Leu Arg His Leu Gln Asp Leu Val Leu Phe Trp Ser Gly  
                     50                      55                      60  
 Pro Leu Gln Thr Leu Asn His Gln Pro Ala Ala Phe Val Val Leu Asp  
   65                      70                      75                      80  
 Val Ser Ala Asn Phe Ala Gly His Thr Gly Val Pro Lys Glu Val Lys  
                     85                      90                      95  
 Val Ile Ile Leu Gly Arg Glu Gly Glu Gly Ser Lys Arg Gly Arg Met  
                     100                      105                      110  
 Arg Phe Leu Gly Arg Gly Gly Val Lys Leu Val Pro Val Leu Cys Tyr

115	120	125
Cys Leu Leu Pro Ser Tyr Leu Asn Leu Lys Glu Leu Pro His Leu Gln		
130	135	140
Gln Asp Leu Leu Gly Ile Gly Val Leu Leu Leu Ala Ile Asn Ser Cys		
145	150	155
Leu Gln Gly Lys Gly Gly		160
	165	

&lt;210&gt; 3376

&lt;211&gt; 559

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3376

Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu Leu			
1	5	10	15
Leu Leu Ser Ile Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala			
20	25	30	
Ile Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Ala Leu Gly Pro			
35	40	45	
Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly			
50	55	60	
Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala			
65	70	75	80
Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Tyr Lys Ala Ala			
85	90	95	
Lys Ala Gly Ala Gly Leu Gly Gly Val Pro Gly Val Gly Gly Leu Gly			
100	105	110	
Val Ser Ala Ala Pro Ser Val Pro Gly Ala Val Val Pro Gln Pro Gly			
115	120	125	
Ala Gly Val Lys Pro Gly Lys Val Pro Gly Val Gly Leu Pro Gly Val			
130	135	140	
Tyr Pro Gly Gly Val Leu Pro Gly Ala Arg Phe Pro Gly Val Gly Val			
145	150	155	160
Leu Pro Gly Val Pro Thr Gly Ala Gly Val Lys Pro Lys Ala Pro Gly			



	165	170	175
Val Gly Gly Ala Phe Ala Gly Ile Pro Gly Val Gly Pro Phe Gly Gly			
	180	185	190
Pro Gln Pro Gly Val Pro Leu Gly Tyr Pro Ile Lys Ala Pro Lys Leu			
	195	200	205
Pro Gly Gly Tyr Gly Leu Pro Tyr Thr Thr Gly Lys Leu Pro Tyr Gly			
	210	215	220
Tyr Gly Pro Gly Gly Val Ala Gly Ala Ala Gly Lys Ala Gly Tyr Pro			
225	230	235	240
Thr Gly Thr Gly Val Gly Pro Gln Ala Ala Ala Ala Ala Ala Lys			
	245	250	255
Ala Ala Ala Lys Phe Gly Ala Gly Ala Ala Gly Val Leu Pro Gly Val			
	260	265	270
Gly Gly Ala Gly Val Pro Gly Val Pro Gly Ala Ile Pro Gly Ile Gly			
	275	280	285
Gly Ile Ala Gly Val Gly Thr Pro Ala Ala Ala Ala Ala Ala Ala			
	290	295	300
Ala Ala Lys Ala Ala Lys Tyr Gly Ala Ala Ala Gly Leu Val Pro Gly			
305	310	315	320
Gly Pro Gly Phe Gly Pro Gly Val Val Gly Val Pro Gly Ala Gly Val			
	325	330	335
Pro Gly Val Gly Val Pro Gly Ala Gly Ile Pro Val Val Pro Gly Ala			
	340	345	350
Gly Ile Pro Gly Ala Ala Val Pro Gly Val Val Ser Pro Glu Ala Ala			
	355	360	365
Ala Lys Ala Ala Ala Lys Ala Ala Lys Tyr Gly Ala Arg Pro Gly Val			
	370	375	380
Gly Val Gly Gly Ile Pro Thr Tyr Gly Val Gly Ala Gly Gly Phe Pro			
385	390	395	400
Gly Phe Gly Val Gly Val Gly Gly Ile Pro Gly Val Ala Gly Val Pro			
	405	410	415
Gly Val Gly Gly Ser Arg Ser Arg Arg Cys Pro Gly Ser Trp His Phe			
	420	425	430
Pro Arg Ser Ser Gly Ser Ser Cys Arg Gln Gly Cys Gln Val Arg Val			
	435	440	445
Ser Ser Trp Cys Arg Arg Gly Ser Trp Ser Trp Arg Gly Ser Trp Cys			

450                      455                      460  
 Arg Cys Gly Ser Trp Ser Trp Leu Gly Ser Trp Ser Trp Arg Gly Ser  
 465                      470                      475                      480  
 Trp Ser Trp Cys Gly Ser Trp Arg Trp Arg Gly Ser Arg His Trp Pro  
                     485                      490                      495  
 Trp Trp Ser Cys Ser Cys Ser Lys Ile Arg Cys Gln Gly Gly Cys Gln  
                     500                      505                      510  
 Ser Pro Ala Pro Ser Cys Ser Trp Ala Trp Cys Trp His Pro Trp Thr  
                     515                      520                      525  
 Trp Ser Trp Cys Arg Arg Pro Trp Thr Trp Ser Trp Cys Trp Cys Ser  
                     530                      535                      540  
 Trp Thr Trp Ser Trp Cys Trp Cys Ser Trp Leu Arg Gly Ser Thr  
 545                      550                      555

<210> 3377

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3377

Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu Pro Gly Thr Leu Lys  
   1                      5                      10                      15  
 Thr Ser Leu Val Ala Thr Pro Gly Ile Asp Lys Leu Thr Glu Lys Ser  
                     20                      25                      30  
 Gln Val Ser Glu Asp Gly Thr Leu Arg Ser Leu Glu Pro Glu Pro Gln  
                     35                      40                      45  
 Gln Ser Leu Glu Asp Gly Ser Pro Ala Lys Gly Glu Pro Ser Gln Ala  
                     50                      55                      60  
 Trp Arg Glu Gln Arg Arg Pro Ser Thr Ser Ser Ala Ser Gly Gln Trp  
   65                      70                      75                      80  
 Ser Pro Thr Pro Glu Trp Val Leu Ser Trp Lys Ser Lys Leu Pro Leu  
                     85                      90                      95  
 Gln Thr Ile Met Arg Leu Leu Gln Val Leu Val Pro Gln Val Glu Lys  
                     100                      105                      110  
 Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu Ser Glu Ile Leu Arg Phe

115	120	125
Leu Gln His Gly Thr Leu Val Gly Leu Leu Pro Val Pro His Pro Ile		
130	135	140
Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly Thr Ala Met Trp Phe Arg		
145	150	155
Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg Asn Val Asp Pro Pro Val		
	165	170
Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu Ile Gln Arg Val		175
	180	185
		190

&lt;210&gt; 3378

&lt;211&gt; 166

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3378

Met Lys Pro His Lys Ser Leu Ala Arg His Ile Ile Ile Pro Val Leu
1 5 10 15
Leu Ser Arg Lys Leu Ser Glu Arg Asp Tyr Arg Asn Cys Pro Gly His
20 25 30
Pro Ala Gly Lys Trp Arg Ile Gln Val Ser Thr Pro Gly Pro Ala Pro
35 40 45
Ala Tyr Phe Leu Phe Ser Met Cys Glu Ile Gln Cys Tyr Pro Val Ser
50 55 60
Glu Ser Ser Val Arg Cys Gly Ser Cys His Pro Phe Leu Trp Pro Cys
65 70 75 80
Ser Leu Arg Leu Phe Lys Leu Leu Leu Leu Ser Arg Thr Leu Phe His
85 90 95
Ile Ser Gln Pro Leu Asn Cys Leu Asn Gly Pro Arg Cys Leu Arg Pro
100 105 110
Ile Thr Ser Gly His Ala Lys Val Gly Phe Ala Val Pro Arg Arg Asp
115 120 125
Cys Ser Ala Gln Pro Arg Leu Pro Phe Pro Leu Pro Val Pro Ile Leu
130 135 140
Pro Cys Thr Ile Cys Pro Leu His Gly Gln Gly Arg Gly Pro Ser Gly

<210> 3379  
<211> 538  
<212> PRT  
<213> Homo sapiens

Met	Gly	Leu	Leu	Leu	Leu	Val	Leu	Ile	Leu	Thr	Pro	Ser	Leu	Ala	Ala
1				5					10					15	
Tyr	Arg	His	Pro	Asp	Phe	Pro	Leu	Leu	Glu	Lys	Ala	Gln	Gln	Leu	Leu
			20					25					30		
Gln	Ser	Thr	Gly	Ser	Pro	Tyr	Ser	Thr	Asn	Cys	Trp	Leu	Cys	Thr	Ser
		35					40					45			
Ser	Ser	Thr	Glu	Thr	Pro	Gly	Thr	Ala	Tyr	Pro	Ala	Ser	Pro	Arg	Glu
	50						55				60				
Trp	Thr	Ser	Ile	Glu	Ala	Glu	Leu	His	Ile	Ser	Tyr	Arg	Trp	Asp	Pro

65						70						75						80
Asn	Leu	Lys	Gly	Leu	Met	Arg	Pro	Ala	Asn	Ser	Leu	Leu	Ser	Thr	Val			
					85						90						95	
Lys	Gln	Asp	Phe	Pro	Asp	Ile	Arg	Gln	Lys	Pro	Pro	Ile	Phe	Gly	Pro			
					100						105						110	
Ile	Phe	Thr	Asn	Ile	Asn	Leu	Met	Gly	Ile	Ala	Pro	Ile	Cys	Val	Met			
					115						120						125	
Ala	Lys	Arg	Lys	Asn	Gly	Thr	Asn	Val	Gly	Thr	Leu	Pro	Ser	Thr	Val			
					130						135						140	
Cys	Asn	Val	Thr	Phe	Thr	Val	Asp	Ser	Asn	Gln	Gln	Thr	Tyr	Gln	Thr			
					145						150						155	160
Tyr	Thr	His	Asn	Gln	Phe	Arg	His	Gln	Pro	Arg	Phe	Pro	Lys	Pro	Pro			
					165						170						175	
Asn	Ile	Thr	Phe	Pro	Gln	Gly	Thr	Leu	Leu	Asp	Lys	Ser	Ser	Arg	Phe			
					180						185						190	

Cys Gln Gly Arg Pro Ser Ser Cys Ser Thr Arg Asn Phe Trp Phe Arg			
195	200	205	
Pro Ala Asp Tyr Asn Gln Cys Leu Gln Ile Ser Asn Leu Ser Ser Thr			
210	215	220	
Ala Glu Trp Val Leu Leu Asp Gln Thr Arg Asn Ser Leu Phe Trp Glu			
225	230	235	240
Asn Lys Thr Lys Gly Ala Asn Gln Ser Gln Thr Pro Cys Val Gln Val			
245	250	255	
Leu Ala Gly Met Thr Ile Ala Thr Ser Tyr Leu Gly Ile Ser Ala Val			
260	265	270	
Ser Glu Phe Phe Gly Thr Ser Leu Thr Pro Leu Phe His Phe His Ile			
275	280	285	
Ser Thr Cys Leu Lys Thr Gln Gly Ala Phe Tyr Ile Cys Gly Gln Ser			
290	295	300	
Ile His Gln Cys Leu Pro Ser Asn Trp Thr Gly Thr Cys Thr Ile Gly			
305	310	315	320
Tyr Val Thr Pro Asp Ile Phe Ile Ala Pro Gly Asn Leu Ser Leu Pro			
325	330	335	
Ile Pro Ile Tyr Gly Asn Ser Pro Leu Pro Arg Val Arg Arg Ala Ile			
340	345	350	
His Phe Ile Pro Leu Leu Ala Gly Leu Gly Ile Leu Ala Gly Thr Gly			
355	360	365	
Thr Gly Ile Ala Gly Ile Thr Lys Ala Ser Leu Thr Tyr Ser Gln Leu			
370	375	380	
Ser Lys Glu Ile Ala Asn Asn Ile Asp Thr Met Ala Lys Ala Leu Thr			
385	390	395	400
Thr Met Gln Glu Gln Ile Asp Ser Leu Ala Ala Val Val Leu Gln Asn			
405	410	415	
Arg Arg Gly Leu Asp Met Leu Thr Ala Ala Gln Gly Gly Ile Cys Leu			
420	425	430	
Ala Leu Asp Glu Lys Cys Cys Phe Trp Val Asn Gln Ser Gly Lys Val			
435	440	445	
Gln Asp Asn Ile Arg Gln Leu Leu Asn Gln Ala Ser Ser Leu Arg Glu			
450	455	460	
Arg Ala Thr Gln Gly Trp Leu Asn Trp Glu Gly Thr Trp Lys Trp Phe			
465	470	475	480

Ser Trp Val Leu Pro Leu Thr Gly Pro Leu Val Ser Leu Leu Leu Leu  
                     485                    490                    495  
 Leu Leu Phe Gly Pro Cys Leu Leu Asn Leu Ile Thr Gln Phe Val Ser  
                     500                    505                    510  
 Ser Arg Leu Gln Ala Ile Lys Leu Gln Thr Asn Leu Ser Ala Gly Arg  
                     515                    520                    525  
 His Pro Arg Asn Ile Gln Glu Ser Pro Phe  
                     530                    535

<210> 3380

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3380

Met Ala Thr Thr Ile Ser Lys Leu Lys Val Asp Leu Asp Phe Asp Ser  
   1                    5                    10                    15  
 Ser Ser Ile Ser Gln Ile His Leu Val Leu Phe Gly Phe Gln Asp Ala  
                     20                    25                    30  
 Val Asn Lys Ile Leu Arg Asn His Leu Ile Arg Pro His Trp Met Phe  
                     35                    40                    45  
 Ala Met Asp Asn Ile Ile Arg Arg Ala Val Gln Ala Ala Val Thr Ile  
                     50                    55                    60  
 Leu Ile Pro Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu  
   65                    70                    75                    80  
 Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala  
                     85                    90                    95  
 Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu  
                     100                    105                    110  
 Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu  
                     115                    120                    125  
 Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu  
                     130                    135                    140  
 Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn  
   145                    150                    155                    160

Cys Ile Thr Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys  
                     165                    170                    175  
 Glu Leu Ile Gly Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile  
                     180                    185                    190  
 Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser Asp Ile Leu Asn Glu  
                     195                    200                    205  
 Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu  
                     210                    215                    220  
 Cys Arg Leu Trp Ser Ala Val Ser Gln Tyr Arg Arg Ala Gln Glu Ala  
 225                    230                    235                    240  
 Ser Glu Thr Lys Asp Lys Ala  
                     245

<210> 3381

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3381

Met Glu Glu Val Arg Glu Gly His Ala Leu Gly Gly Gly Met Glu Ala  
     1                    5                    10                    15  
 Asp Gly Pro Ala Ser Leu Gln Glu Leu Pro Pro Ser Pro Arg Ser Pro  
                     20                    25                    30  
 Ser Pro Pro Pro Ser Pro Pro Pro Leu Pro Ser Pro Pro Ser Leu Pro  
                     35                    40                    45  
 Ser Pro Ala Ala Pro Glu Ala Pro Glu Leu Pro Glu Pro Ala Gln Pro  
                     50                    55                    60  
 Ser Glu Ala His Ala Arg Gln Leu Leu Leu Glu Glu Trp Gly Pro Leu  
     65                    70                    75                    80  
 Ser Gly Gly Leu Glu Leu Pro Gln Arg Leu Thr Trp Lys Leu Leu Leu  
                     85                    90                    95  
 Leu Arg Arg Pro Leu Tyr Arg Asn Leu Leu Arg Ser Pro Asn Pro Glu  
                     100                    105                    110  
 Gly Ile Asn Ile Tyr Glu Pro Ala Pro Pro Thr Gly Pro Thr Gln Arg  
                     115                    120                    125

Pro Leu Glu Thr Leu Gly Asn Phe Arg Gly Trp Tyr Ile Arg Thr Glu  
 130 135 140  
 Lys Leu Gln Gln Asn Gln Ser Trp Thr Val Lys Gln Gln Cys Val Asp  
 145 150 155 160  
 Leu Leu Ala Glu Gly Leu Trp Glu Glu Leu Leu Asp Asp Glu Gln Pro  
 165 170 175  
 Ala Ile Thr Val Met Asp Trp Phe Glu Asp Ser Arg Leu Asp Ala Cys  
 180 185 190  
 Val Tyr Glu Leu His Val Trp Leu Leu Ala Ala Asp Arg Arg Thr Val  
 195 200 205  
 Ile Ala Gln His His Val Ala Pro Arg Thr Ser Gly Arg Gly Pro Pro  
 210 215 220  
 Gly Arg Trp Val Gln Val Ser His Val Phe Arg His Tyr Gly Pro Gly  
 225 230 235 240  
 Val Arg Phe Ile His Phe Leu His Lys Ala Lys Asn Arg Met Glu Pro  
 245 250 255  
 Gly Gly Leu Arg Arg Thr Arg Val Thr Asp Ser Ser Val Ser Val Gln  
 260 265 270  
 Leu Arg Glu  
 275

<210> 3382

<211> 452

<212> PRT

<213> Homo sapiens

<400> 3382

Met Lys Val Gln Pro Ser Val Thr Cys Val Ala Ser Trp Gly Gly Ile  
 1 5 10 15  
 Val His Leu Glu Ala Phe Gly Asp Pro Val Ile Val Leu Arg Gly Ala  
 20 25 30  
 Trp Ala Val Pro Arg Val Asp Cys Leu Ile Asp Thr Leu Arg Thr Pro  
 35 40 45  
 Asn Ala Ser Cys Met Arg Lys Gly Thr His Leu Leu Val Pro Cys Leu  
 50 55 60



Glu Glu Glu Glu Leu Ala Leu His Arg Arg Arg Leu Asp Met Ser Glu  
 65                                70                                75                                80  
 Ala Leu Pro Cys Pro Gly Lys Glu Thr Pro Thr Pro Gly Cys Arg Leu  
                                   85                                90                                95  
 Gly Ala Leu Tyr Trp Ala Cys Val His Asn Asp Pro Thr Gln Leu Gln  
                                   100                                105                                110  
 Ala Ile Leu Asp Gly Gly Val Ser Pro Glu Glu Ala Thr Gln Val Asp  
                                   115                                120                                125  
 Ser Asn Gly Arg Thr Gly Leu Met Val Ala Cys Phe His Gly Phe Gln  
                                   130                                135                                140  
 Ser Val Val Ala Leu Leu Ser His Cys Pro Phe Leu Asp Val Asn Gln  
 145                                150                                155                                160  
 Gln Asp Lys Gly Gly Asp Thr Ala Leu Met Leu Ala Ala Gln Ala Gly  
                                   165                                170                                175  
 His Val Pro Leu Val Ser Leu Leu Leu Asn Tyr Tyr Val Gly Leu Asp  
                                   180                                185                                190  
 Leu Glu Arg Arg Asp Gln Arg Gly Leu Thr Ala Leu Met Lys Ala Ala  
                                   195                                200                                205  
 Met Arg Asn Arg Cys Ala Asp Leu Thr Ala Val Asp Pro Val Arg Gly  
                                   210                                215                                220  
 Lys Thr Ala Leu Glu Trp Ala Val Leu Thr Asp Ser Phe Asp Thr Val  
 225                                230                                235                                240  
 Trp Arg Ile Arg Gln Leu Leu Arg Arg Pro Gln Val Glu Gln Leu Ser  
                                   245                                250                                255  
 Arg His Tyr Lys Pro Glu Trp Pro Ala Leu Ser Gly Leu Val Ala Gln  
                                   260                                265                                270  
 Ala Gln Ala Gln Ala Gln Val Ala Pro Ser Leu Leu Glu Arg Leu Gln  
                                   275                                280                                285  
 Ala Thr Leu Ser Leu Pro Phe Ala Pro Ser Pro Gln Glu Gly Gly Val  
                                   290                                295                                300  
 Leu Asp His Leu Val Thr Ala Thr Thr Ser Leu Ala Ser Pro Phe Val  
 305                                310                                315                                320  
 Thr Thr Ala Cys His Thr Leu Cys Pro Asp His Pro Pro Ser Leu Gly  
                                   325                                330                                335  
 Thr Arg Ser Lys Ser Val Pro Glu Leu Leu Gly Thr Ala Pro Pro Pro  
                                   340                                345                                350

Pro	Leu	Val	Pro	Gln	Ser	Pro	Pro	Gly	Ser	Pro	Gln	Arg	Ser	Pro	Trp	
355						360						365				
Val	Phe	Val	Pro	Tyr	Gln	Ser	Pro	Gln	Gly	Ile	Leu	Ser	Lys	Cys	Leu	
370						375						380				
Gln	Trp	Leu	Gln	Pro	Arg	Asp	Ser	Thr	Ser	Pro	Arg	Pro	Gln	Val	Pro	
385						390						395			400	
Lys	Ile	Leu	Leu	Ser	Lys	Ala	Ser	Ser	Ser	Ser	His	Gln	Cys	Gln	Pro	
			405						410						415	
Lys	Pro	Ser	Pro	Ser	Gly	His	Gln	Ser	Leu	Ala	Leu	Pro	Leu	Trp	Arg	
			420						425						430	
Tyr	Gln	Glu	Leu	Arg	Ile	Glu	Lys	Arg	Lys	Gln	Glu	Glu	Glu	Ala	Arg	
435						440						445				
Met	Ala	Gln	Lys													
450																

<210> 3383

&lt;211&gt; 409

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3383

Met	Val	Glu	Leu	Phe	Ile	Phe	Leu	Phe	Leu	Leu	Gly	Glu	Thr	Pro	Phe
1				5					10					15	
Lys	Val	Val	Val	Lys	Ser	Leu	Ser	Pro	Lys	Glu	Leu	Val	Arg	Ile	His
				20					25					30	
Val	Pro	Lys	Pro	Leu	Asp	Arg	Asn	Asp	Gly	Thr	Phe	Leu	Met	Arg	Tyr
				35					40					45	
Arg	Met	Tyr	Glu	Thr	Val	Asp	Glu	Gly	Leu	Lys	Ile	Glu	Val	Leu	Tyr
				50					55					60	
Gly	Asp	Glu	His	Val	Ala	Gln	Ser	Pro	Tyr	Ile	Leu	Lys	Gly	Pro	Val
65					70					75					80
Tyr	His	Glu	Tyr	Cys	Glu	Cys	Pro	Glu	Asp	Pro	Gln	Ala	Trp	Gln	Lys
				85						90					95
Thr	Leu	Ser	Cys	Pro	Thr	Lys	Glu	Pro	Gln	Ile	Ala	Lys	Asp	Phe	Ala
				100					105					110	

Ser Phe Pro Ser Ile Asn Leu Gln Gln Met Leu Lys Glu Val Pro Lys  
 115 120 125  
 Arg Phe Gly Asp Glu Arg Gly Ala Ile Val His Tyr Thr Ile Leu Asn  
 130 135 140  
 Asn His Val Tyr Arg Arg Ser Leu Gly Lys Tyr Thr Asp Phe Lys Met  
 145 150 155 160  
 Phe Ser Asp Glu Ile Leu Leu Ser Leu Thr Arg Lys Val Leu Leu Pro  
 165 170 175  
 Asp Leu Glu Phe Tyr Val Asn Leu Gly Asp Trp Pro Leu Glu His Arg  
 180 185 190  
 Lys Val Asn Gly Thr Pro Ser Pro Ile Pro Ile Ile Ser Trp Cys Gly  
 195 200 205  
 Ser Leu Asp Ser Arg Asp Val Val Leu Pro Thr Tyr Asp Ile Thr His  
 210 215 220  
 Ser Met Leu Glu Ala Met Arg Gly Val Thr Asn Asp Leu Leu Ser Ile  
 225 230 235 240  
 Gln Gly Asn Thr Gly Pro Ser Trp Ile Asn Lys Thr Glu Arg Ala Phe  
 245 250 255  
 Phe Arg Gly Arg Asp Ser Arg Glu Glu Arg Leu Gln Leu Val Gln Leu  
 260 265 270  
 Ser Lys Glu Asn Pro Gln Leu Leu Asp Ala Gly Ile Thr Gly Tyr Phe  
 275 280 285  
 Phe Phe Gln Glu Lys Glu Lys Glu Leu Gly Lys Ala Lys Leu Met Gly  
 290 295 300  
 Phe Phe Asp Phe Phe Lys Tyr Lys Tyr Gln Val Asn Val Asp Gly Thr  
 305 310 315 320  
 Val Ala Ala Tyr Arg Tyr Pro Tyr Leu Met Leu Gly Asp Ser Leu Val  
 325 330 335  
 Leu Lys Gln Asp Ser Pro Tyr Tyr Glu His Phe Tyr Met Ala Leu Glu  
 340 345 350  
 Pro Trp Lys His Tyr Val Pro Ile Lys Arg Asn Leu Ser Asp Leu Leu  
 355 360 365  
 Glu Lys Val Lys Trp Ala Lys Ser Phe Thr Leu Ser Pro Arg Leu Glu  
 370 375 380  
 Cys Ser Gly Thr Ile Ser Thr His Cys Asn Leu Cys Leu Pro Gly Ser  
 385 390 395 400

Arg Asn Phe Val Pro Gln Pro Pro Glu

405

<210> 3384

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3384

Met Arg Lys Pro Arg Glu Met Arg Gly Leu Ala Gln Gly Arg Gly Val

1 5 10 15

His Ser Gln Leu Cys Leu Leu Leu Thr Gln Asn Lys Asp Leu Gly Thr

20 25 30

Pro Arg Gly Ser Trp Pro Ser Gly Met Asp Ser Trp His Leu Arg Ala

35 40 45

Ser Arg Leu Gln Pro Ser Gly Ser His Gly Cys Pro Lys Ser Ser Gly

50 55 60

Pro Leu Leu Gly Ser Trp Leu Gly Cys Leu Ala Leu Pro Asp Arg Arg

65 70 75 80

Leu Leu Gly Ser Cys Leu Leu Gly Asp Ala Ser Cys Arg Ser Trp Cys

85 90 95

Gly Gly Gly Gln Gly Gly Gly Gly Phe Phe Leu Ser Leu Ser Leu Ser

100 105 110

Ser Thr Phe Ser Pro Leu Pro Arg Gly Asn Gly Ser Arg Ile Ser Phe

115 120 125

Lys Arg Met Leu Leu Tyr Phe Ala Ser Gly Trp Lys Val Ala Val Leu

130 135 140

Ala Pro Val Ser Cys Thr Trp Thr Pro Val

145 150

<210> 3385

<211> 141

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3385

Met Val His Ala Cys Gln Val Ser Ser Glu Cys Ser Gly Cys Leu Arg  
 1 5 10 15  
 Gly Gly Glu Glu Gly Met Pro Trp Leu Leu Pro Pro Leu Cys His His  
 20 25 30  
 Leu Pro Ala His Leu Gly Leu Lys Ser Val Trp Thr Ala Glu Ser Val  
 35 40 45  
 Ser Glu Lys Pro Val Leu Gly Gln Glu Leu Gly Asn Arg Ala Val Lys  
 50 55 60  
 Glu Val Gln Ser Gly Glu Glu Arg Arg Lys Leu Asp Leu Gly Thr Asp  
 65 70 75 80  
 Arg Ile Pro Gln Ala Cys Ser Thr Ser Gln Pro Leu Tyr Ala Pro Thr  
 85 90 95  
 Leu Gly Leu Trp Thr Gly Phe Met Phe Cys Leu Ile Ser Val Pro Glu  
 100 105 110  
 Ala Glu Met Gly Met Val Glu Arg Ser Ser Thr Gln Val Ala Pro Gly  
 115 120 125  
 Met Gly Met Ser Thr Pro Tyr Ser Pro Cys Val Ser Ser  
 130 135 140

&lt;210&gt; 3386

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3386

Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln His  
 1 5 10 15  
 Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu Leu  
 20 25 30  
 Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu Ser  
 35 40 45  
 Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe Leu  
 50 55 60

Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln Gly  
 65 70 75 80  
 Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val Gly  
 85 90 95  
 Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser Asn  
 100 105 110  
 Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg Pro  
 115 120 125  
 Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe Glu  
 130 135 140  
 Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu Arg  
 145 150 155 160  
 Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr Met  
 165 170 175  
 Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met Cys  
 180 185 190  
 Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln Gly  
 195 200 205  
 Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp Glu  
 210 215 220  
 Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser Met  
 225 230 235 240  
 Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp Leu  
 245 250 255  
 Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln His  
 260 265 270  
 Arg Gly Ala Val Val Val Leu Asn Met Val Glu Ala Ser Arg Glu Ile  
 275 280 285  
 Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val Leu  
 290 295 300  
 Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Cys Leu  
 305 310 315 320  
 Asp Lys Ala Val Glu Tyr Gly Leu Ile Gln Pro Asn Gln Asp Gly Glu  
 325 330 335

&lt;210&gt; 3387

&lt;211&gt; 1088

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3387

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Met Ala Asn Gly Thr Ala Asp Val Arg Lys Leu Phe Ile Phe Thr Thr
  1           5           10           15
Thr Gln Asn Tyr Phe Gly Leu Met Ser Glu Leu Trp Asp Gln Pro Leu
          20           25           30
Leu Cys Asn Cys Leu Glu Ile Asn Asn Phe Leu Asp Asp Gly Asn Gln
          35           40           45
Met Leu Leu Arg Val Gln Arg Ser Asp Ala Gly Ile Ser Phe Ser Asn
          50           55           60
Thr Ile Glu Phe Gly Asp Thr Lys Asp Lys Val Leu Val Phe Phe Lys
          65           70           75           80
Leu Arg Pro Glu Val Ile Thr Asp Glu Asn Leu His Asp Asn Ile Leu
          85           90           95
Val Ser Ser Met Leu Glu Ser Pro Ile Ser Ser Leu Tyr Gln Ala Val
          100          105          110
Arg Gln Val Phe Ala Pro Met Leu Leu Lys Asp Gln Glu Trp Ser Arg
          115          120          125
Asn Phe Asp Pro Lys Leu Gln Asn Leu Leu Ser Glu Leu Glu Ala Gly
          130          135          140
Leu Gly Ile Val Leu Arg Arg Ser Asp Thr Asn Leu Thr Lys Leu Lys
          145          150          155          160
Phe Lys Glu Asp Asp Thr Arg Gly Ile Leu Thr Pro Ser Asp Glu Phe
          165          170          175
Gln Phe Trp Ile Glu Gln Ala His Arg Gly Asn Lys Gln Ile Ser Lys
          180          185          190
Glu Arg Ala Asn Tyr Phe Lys Glu Leu Phe Glu Thr Ile Ala Arg Glu
          195          200          205
Phe Tyr Asn Leu Asp Ser Leu Ser Leu Leu Glu Val Val Asp Leu Val
          210          215          220
Glu Thr Thr Gln Asp Val Val Asp Asp Val Trp Arg Gln Thr Glu His
          225          230          235          240

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Leu Tyr Glu Gln Glu Gln Phe Asp Asp Trp Ser Arg Asp Ile Gln Ser  
 530 535 540  
 Gly Leu Ser Asp Ser Arg Ser Gly Leu Cys Ile Glu Ala Ser Ser Arg  
 545 550 555 560  
 Ile Met Glu Leu Asp Ser Asn Asp Gly Leu Leu Lys Val His Tyr Ser  
 565 570 575  
 Asp Arg Leu Val Ile Leu Leu Arg Glu Val Arg Gln Leu Ser Ala Leu  
 580 585 590  
 Gly Phe Val Ile Pro Ala Lys Ile Gln Gln Val Ala Asn Ile Ala Gln  
 595 600 605  
 Lys Phe Cys Lys Gln Ala Ile Ile Leu Lys Gln Val Ala His Phe Tyr  
 610 615 620  
 Asn Ser Ile Asp Gln Gln Met Ile Gln Ser Gln Arg Pro Met Met Leu  
 625 630 635 640  
 Gln Ser Ala Leu Ala Phe Glu Gln Ile Ile Lys Asn Ser Lys Ala Gly  
 645 650 655  
 Ser Gly Gly Lys Ser Gln Ile Thr Trp Asp Asn Pro Lys Glu Leu Glu  
 660 665 670  
 Gly Tyr Ile Gln Lys Leu Gln Asn Ala Ala Glu Arg Leu Ala Thr Glu  
 675 680 685  
 Asn Arg Lys Leu Arg Lys Trp His Thr Thr Phe Cys Glu Lys Val Val  
 690 695 700  
 Val Leu Met Asn Ile Asp Leu Leu Arg Gln Gln Gln Arg Trp Lys Asp  
 705 710 715 720  
 Gly Leu Gln Glu Leu Arg Thr Gly Leu Ala Thr Val Glu Ala Gln Gly  
 725 730 735  
 Phe Gln Ala Ser Asp Met His Ala Trp Lys Gln His Trp Asn His Gln  
 740 745 750  
 Leu Tyr Lys Ala Leu Glu His Gln Tyr Gln Met Gly Leu Glu Ala Leu  
 755 760 765  
 Asn Glu Asn Leu Pro Glu Ile Asn Ile Asp Leu Thr Tyr Lys Gln Gly  
 770 775 780  
 Arg Leu Gln Phe Arg Pro Pro Phe Glu Glu Ile Arg Ala Lys Tyr Tyr  
 785 790 795 800  
 Arg Glu Met Lys Arg Phe Ile Gly Ile Pro Asn Gln Phe Lys Gly Val  
 805 810 815

Gly Glu Ala Gly Asp Glu Ser Ile Phe Ser Ile Met Ile Asp Arg Asn  
                   820                  825                  830  
 Ala Ser Gly Phe Leu Thr Ile Phe Ser Lys Ala Glu Asp Leu Phe Arg  
                   835                  840                  845  
 Arg Leu Ser Ala Val Leu His Gln His Lys Glu Trp Ile Val Ile Gly  
                   850                  855                  860  
 Gln Val Asp Met Glu Ala Leu Val Glu Lys His Leu Phe Thr Val His  
 865                  870                  875                  880  
 Asp Trp Glu Lys Asn Phe Lys Ala Leu Lys Ile Lys Gly Lys Glu Val  
                   885                  890                  895  
 Glu Arg Leu Pro Ser Ala Val Lys Val Asp Cys Leu Asn Ile Asn Cys  
                   900                  905                  910  
 Asn Pro Val Lys Thr Val Ile Asp Asp Leu Ile Gln Lys Leu Phe Asp  
                   915                  920                  925  
 Leu Leu Val Leu Ser Leu Lys Lys Ser Ile Gln Ala His Leu His Glu  
                   930                  935                  940  
 Ile Asp Thr Phe Val Thr Glu Ala Met Glu Val Leu Thr Ile Met Pro  
 945                  950                  955                  960  
 Gln Ser Val Glu Glu Ile Gly Asp Ala Asn Leu Gln Tyr Ser Lys Leu  
                   965                  970                  975  
 Gln Glu Arg Lys Pro Glu Ile Leu Pro Leu Phe Gln Glu Ala Glu Asp  
                   980                  985                  990  
 Lys Asn Arg Leu Leu Arg Thr Val Ala Gly Gly Gly Leu Glu Thr Ile  
                   995                  1000                  1005  
 Ser Asn Leu Lys Ala Lys Trp Asp Lys Phe Glu Leu Met Met Glu Ser  
                   1010                  1015                  1020  
 His Gln Leu Met Ile Lys Asp Gln Ile Glu Val Met Lys Gly Asn Val  
 1025                  1030                  1035                  1040  
  
 Lys Ser Arg Leu Gln Ile Tyr Tyr Gln Glu Leu Glu Lys Phe Lys Ala  
                   1045                  1050                  1055  
 Arg Trp Asp Gln Leu Lys Pro Gly Asp Asp Val Ile Glu Thr Gly Gln  
                   1060                  1065                  1070  
 His Asn Thr Leu Asp Lys Ser Ala Lys Leu Ile Lys Glu Lys Lys Ile  
                   1075                  1080                  1085

&lt;210&gt; 3388

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3388

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Met Leu Leu Pro Asp Asp Phe Lys Ala Ser Ser Lys Ile Lys Val Asn
  1             5             10             15
Asn His Leu Phe His Arg Glu Asn Leu Pro Ser His Phe Lys Phe Lys
      20             25             30
Glu Tyr Cys Pro Gln Val Phe Arg Asn Leu Arg Asp Arg Phe Gly Ile
      35             40             45
Asp Asp Gln Asp Tyr Leu Val Thr Leu Thr Arg Asn Pro Pro Ser Glu
      50             55             60
Ser Glu Gly Ser Asp Gly Arg Phe Leu Ile Ser Tyr Asp Arg Thr Leu
      65             70             75             80
Val Ile Lys Glu Val Ser Ser Glu Asp Ile Ala Asp Met His Ser Asn
      85             90             95
Leu Ser Asn Tyr His Gln Tyr Ile Val Lys Cys His Gly Asn Thr Leu
      100            105            110
Leu Pro Gln Phe Leu Gly Met Tyr Arg Val Ser Val Asp Asn Glu Asp
      115            120            125
Ser Tyr Met Leu Val Met Arg Asn Met Phe Ser His Arg Leu Pro Val
      130            135            140
His Arg Lys Tyr Asp Leu Lys Gly Ser Leu Val Ser Arg Glu Ala Ser
      145            150            155            160
Asp Lys Glu Lys Val Lys Glu Leu Pro Thr Leu Lys Asp Met Asp Phe
      165            170            175
Leu Asn Lys Asn Gln Lys Val Tyr Ile Gly Glu Glu Glu Lys Lys Ile
      180            185            190
Phe Leu Glu Lys Leu Lys Arg Asp Val Glu Phe Leu Val Gln Leu Lys
      195            200            205
Ile Met Asp Tyr Ser Leu Leu Leu Gly Ile His Asp Ile Ile Arg Gly
      210            215            220
Ser Glu Pro Glu Glu Glu Ala Pro Val Arg Glu Asp Glu Ser Glu Val

```

225                      230                      235                      240  
 Asp Gly Asp Cys Ser Leu Thr Gly Pro Pro Ala Leu Val Gly Ser Tyr  
                          245                      250                      255  
 Gly Thr Ser Pro Glu Gly Ile Gly Gly Tyr Ile His Ser His Arg Pro  
                          260                      265                      270  
 Leu Gly Pro Gly Glu Phe Glu Ser Phe Ile Asp Val Tyr Ala Ile Arg  
                          275                      280                      285  
 Ser Ala Glu Gly Ala Pro Gln Lys Glu Val Tyr Phe Met Gly Leu Ile  
                          290                      295                      300  
 Asp Ile Leu Thr Gln Tyr Asp Ala Lys Lys Lys Ala Ala His Ala Ala  
 305                      310                      315                      320  
 Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val His Pro  
                          325                      330                      335  
 Glu Gln Tyr Ala Lys Arg Phe Leu Asp Phe Ile Thr Asn Ile Phe Ala  
                          340                      345                      350

<210> 3389

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3389

Met Gln Pro Arg Ser Arg Trp Gln Ala Gln Asn Ser Glu Thr Lys Ser  
   1                      5                      10                      15  
 His Gly Ala Lys Val Arg His Ala Phe Leu Ala His Leu Cys Val Lys  
                          20                      25                      30  
 Lys Val Thr Gly Met Leu Thr Thr Gln Val Leu Gly Val Arg Pro Gly  
                          35                      40                      45  
 Gln Arg Arg Gly Pro Cys Cys Ser Arg Ile Asp Arg Gln Leu Ala Ser  
                          50                      55                      60  
 Lys Leu Gly Ala Gln Arg Gln Arg Leu Pro Ile His Leu Ser Thr Leu  
                          65                      70                      75                      80  
 Leu Ser His Leu Phe Pro Lys Asp Asp Pro Lys Ala Leu His Ser Ile  
                          85                      90                      95  
 Phe Gln Arg Asp Met Gly Val Glu Gly Met Glu Val Leu Ser His Leu

100 105 110  
 Leu Leu Leu His Leu Glu Ala Pro Arg Ser Thr Asp Thr Asp His Pro  
 115 120 125  
 Leu Ser Val Lys Asn Val Leu Phe Gln Glu Ala Pro Gln Leu Arg Leu  
 130 135 140  
 Lys Glu Thr Ala Pro Pro Pro Gly  
 145 150

<210> 3390

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3390

Met Ala Cys Pro Ser Pro Val Ser Arg Arg Leu Ala Arg Ser Thr Leu  
 1 5 10 15  
 Leu Leu Ile Pro Leu Phe Gly Val His Tyr Ile Met Phe Ala Phe Phe  
 20 25 30  
 Pro Asp Asn Phe Lys Pro Glu Val Lys Met Val Phe Glu Leu Val Val  
 35 40 45  
 Gly Ser Phe Gln Gly Phe Val Val Ala Ile Leu Tyr Cys Phe Leu Asn  
 50 55 60  
 Gly Glu Val Gln Ala Glu Leu Arg Arg Lys Trp Arg Arg Trp His Leu  
 65 70 75 80  
 Gln Gly Val Leu Gly Trp Asn Pro Lys Tyr Arg His Pro Ser Gly Gly  
 85 90 95  
 Ser Asn Gly Ala Thr Cys Ser Thr Gln Val Ser Met Leu Thr Arg Val  
 100 105 110  
 Ser Pro Gly Ala Arg Arg Ser Ser Ser Phe Gln Ala Glu Val Ser Leu  
 115 120 125  
 Val

<210> 3391

&lt;211&gt; 136

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3391

```

Met Gly Met Lys Arg Glu His Phe Cys Tyr Leu Pro Asn Ser Trp Glu
  1             5             10            15
Pro Val Asp Ser Leu His Pro His Ala Pro Gly Leu Ala Ala Thr Gly
      20             25            30
Leu Val Cys Val Ser Ser Met Cys Leu Phe Trp His Ile Ser Lys Val
      35             40            45
Arg Tyr Ala Val Cys Gly Leu Val Ser Leu Ala Pro Phe Ala Glu His
      50             55            60
Asn Val Phe Glu Val His Pro Phe Arg Ser Phe Glu Gly Cys Val Ala
      65             70            75            80
Phe His Gly Val Ala Ile His Ser Cys Ala Tyr Gly Arg Leu Asp Cys
      85             90            95
Val Gln Phe Leu Ala Thr Leu Asn Lys Ala Ser Val Asn Met Asp Ser
      100            105            110
Leu Val Leu Glu Arg Met Tyr Val Leu Ser Leu Leu Cys Arg Cys Leu
      115            120            125
Gly Val Asp Cys Trp Val Met Trp
      130            135

```

&lt;210&gt; 3392

&lt;211&gt; 235

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3392

```

Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe
  1             5             10            15
Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile
      20             25            30
Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly

```

35	40	45
Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp		
50	55	60
His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser		
65	70	75
Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu		
85	90	95
Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala		
100	105	110
Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp		
115	120	125
Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser		
130	135	140
Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser		
145	150	155
Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser		
165	170	175
Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala		
180	185	190
Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn		
195	200	205
His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile		
210	215	220
Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser		
225	230	235

&lt;210&gt; 3393

&lt;211&gt; 118

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3393

Met Cys Ala Gln Asn Tyr Val Val Leu Leu Asp Ser Thr Leu Pro Arg
1 5 10 15
Ser Gln Tyr Asp Tyr Ile Leu Pro Gln Val Ser Phe Thr Ala Val Gly

20 25 30  
 Tyr His Lys His Ile Thr Leu Ile Phe Asn Pro Thr Arg Lys Leu Pro  
 35 40 45  
 Glu Gln Asp Ile Ala Gln Gly Ser Tyr Ile Ala Leu Pro Leu Thr Leu  
 50 55 60  
 Leu Val Leu Leu Ala Gly Tyr Asn His Asp Lys Leu Ile Pro Leu Leu  
 65 70 75 80  
 Leu Gln Leu Thr Ser Arg Leu Gln Gly Val Arg Ala Leu Gly Gln Ala  
 85 90 95  
 Ala Ser Asp Asn Ser Gly Pro Glu Asp Ala Lys Arg Gln Ala Lys Lys  
 100 105 110  
 Gln Lys Thr Arg Arg Thr  
 115

<210> 3394

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3394

Met His Arg Leu Lys Cys Met Val Lys Ala Phe Phe Leu Thr Phe Cys  
 1 5 10 15  
 Gln Val Ser Ser Glu Asp Arg Ser Ala Leu Trp Ala Leu Val Thr Phe  
 20 25 30  
 Tyr Gly Gly Asp Cys Gln Leu Thr Leu Asn Lys Lys Cys Thr His Leu  
 35 40 45  
 Ile Val Pro Glu Pro Lys Gly Glu Lys Tyr Glu Cys Ala Leu Lys Arg  
 50 55 60  
 Ala Ser Ile Lys Ile Val Thr Pro Asp Trp Val Leu Asp Cys Val Ser  
 65 70 75 80  
 Glu Lys Thr Lys Lys Asp Glu Ala Phe Tyr His Pro Arg Leu Ile Ile  
 85 90 95  
 Tyr Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Val Glu Asn  
 100 105 110  
 Glu Glu Gln Asp Ser Gln Asn Glu Gly Ser Thr Asp Glu Lys Ser Ser



115	120	125
Pro Ala Ser Ser Gln Glu Gly Ser Pro Ser Gly Asp Gln Gln Phe Ser		
130	135	140
Pro Lys Ser Asn Thr Glu Lys Ser Lys Gly Glu Leu Met Phe Asp Asp		
145	150	155
Ser Ser Asp Ser Ser Pro Glu Lys Gln Glu Arg Asn Leu Asn Trp Thr		
165	170	175
Pro Ala Glu Val Pro Gln Leu Ala Ala Ala Lys Arg Arg Leu Pro Gln		
180	185	190
Gly Lys Glu Pro Gly Leu Ile Asn Leu Cys Ala Asn Val Pro Pro Val		
195	200	205
Pro Gly Asn Ile Leu Pro Pro Glu Val Arg Gly Asn Leu Met Ala Ala		
210	215	220
Gly Gln Asn Leu Gln Ser Ser Glu Arg Ser Glu Met Ile Ala Thr Trp		
225	230	235
Ser Pro Ala Val Arg Thr Leu Arg Asn Ile Thr Asn Asn Ala Asp Ile		
245	250	255
Gln Gln Met Asn Arg Pro Ser Asn Val Ala His Ile Leu Gln Thr Leu		
260	265	270
Ser Ala Pro Thr Lys Asn Leu Glu Gln Gln Val Asn His Ser Gln Gln		
275	280	285
Gly His Thr Asn Ala Asn Ala Val Leu Phe Ser Gln Val Lys Val Thr		
290	295	300
Pro Glu Thr His Met Leu Gln Gln Gln Gln Gln Ala Gln Gln Gln Gln		
305	310	315
Gln Gln His Pro Val Leu His Leu Gln Pro Gln Gln Ile Met Gln Leu		
325	330	335
Gln Gln Gln Gln Gln Gln Gln Ile Ser Gln Gln Pro Tyr Pro Gln Gln		
340	345	350
Pro Pro His Pro Phe Ser Gln Gln Gln Gln Gln Gln Gln Ala His		
355	360	365
Pro His Gln Phe Ser Gln Gln Gln Leu Gln Phe Pro Gln Gln Gln Leu		
370	375	380
His Pro Pro Gln Gln Leu His Arg Pro Gln Gln Gln Leu Gln Pro Phe		
385	390	395
Gln Gln Gln His Ala Leu Gln Gln Gln Phe His Gln Leu Gln Gln His		

405 410 415  
 Gln Leu Gln Gln Gln Gln Leu Ala Gln Leu Gln Gln Gln His Ser Leu  
 420 425 430  
 Leu Gln Gln Gln Gln Gln Gln Gln Ile Gln Gln Gln Gln Leu Gln Arg  
 435 440 445  
 Met His Gln Gln Gln Gln Gln Gln Gln Met Gln Ser Gln Thr Ala Pro  
 450 455 460  
 His Leu Ser Gln Thr Ser Gln Ala Leu Gln His Gln Val Pro Pro Gln  
 465 470 475 480  
 Gln Pro Pro Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro Ser Pro Gln  
 485 490 495  
 Gln His Gln Leu Phe Gly His Asp Pro Ala Val Glu Ile Pro Glu Glu  
 500 505 510  
 Gly Phe Leu Leu Gly Cys Val Phe Ala Ile Ala Asp Tyr Pro Glu Gln  
 515 520 525  
 Met Ser Asp Lys Gln Leu Leu Ala Thr Trp Lys Arg Val Arg Leu Cys  
 530 535 540  
 Leu Glu Glu Gly  
 545

<210> 3395

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3395

Met Gly Ser Leu Met Ala Glu Met Val Val Lys Pro Thr Met Ser Leu  
 1 5 10 15  
 Lys Tyr Ser Val Thr Cys Ser Lys Tyr Ser Gly Ser Thr Gly Val Pro  
 20 25 30  
 Val Phe Lys Ala Ser Ala Thr Asp Leu Gly Met Ala Gly Ser Glu Val  
 35 40 45  
 Thr Trp Gly Pro Leu Tyr Leu Ala Gly Leu Gln Leu Pro Ser Gln Pro  
 50 55 60  
 Thr Pro Ser His Trp His Pro Arg Arg Gln His Leu Cys Lys Gln Pro

65                      70                      75                      80  
 Val Cys Leu Leu Leu Phe Gln Leu Gln Leu Leu Arg Ala Leu Pro Asp  
                          85                      90                      95  
 Gln Ile Leu Gln Val Thr Arg Val Leu Leu Gln His Pro Lys His Arg  
                          100                      105                      110  
 Val Asn Asp Val Arg Leu Pro Ala Leu Val Asp Val Leu Glu Leu Ala  
                          115                      120                      125  
 Val Glu Gly Ser Trp  
                          130

<210> 3396

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3396

Met Gln Pro Gly Leu Ser Pro Gly Ser Pro Gly Asp Pro Arg Pro Pro  
   1                      5                      10                      15  
 Thr Pro Glu Thr Asp Tyr Pro Glu Ser Leu Thr Ser Tyr Pro Glu Glu  
                          20                      25                      30  
 Asp Tyr Ser Pro Val Gly Ser Phe Gly Glu Pro Gly Pro Thr Ser Pro  
                          35                      40                      45  
 Leu Thr Thr Pro Pro Gly Trp Ser Cys His Val Ser Gln Asp Lys Gln  
                          50                      55                      60  
 Met Leu Tyr Thr Asn His Phe Thr Gln Glu Gln Trp Val Arg Leu Glu  
   65                      70                      75                      80  
 Asp Pro His Gly Lys Pro Tyr Phe Tyr Asn Pro Glu Asp Ser Ser Val  
                          85                      90                      95  
 Arg Trp Glu Leu Pro Gln Val Pro Val Pro Ala Pro Arg Ser Ile His  
                          100                      105                      110  
 Lys Ser Ser Gln Asp Gly Asp Thr Pro Ala Gln Ala Ser Pro Pro Glu  
                          115                      120                      125  
 Glu Lys Val Pro Ala Glu Leu Asp Glu Val Gly Ser Trp Glu Glu Val  
                          130                      135                      140  
 Ser Pro Ala Thr Ala Ala Val Arg Thr Lys Thr Leu Asp Lys Ala Gly

145	150	155	160
Val Leu His Arg Thr Lys Thr Ala Asp Lys Gly Lys Arg Leu Arg Lys			
	165	170	175
Lys His Trp Ser Ala Ser Trp Thr Val Leu Glu Gly Gly Val Leu Thr			
	180	185	190
Phe Phe Lys Asp Ser Lys Thr Ser Ala Ala Gly Gly Leu Arg Gln Pro			
	195	200	205
Ser Lys Phe Ser Thr Pro Glu Tyr Thr Val Glu Leu Arg Gly Ala Thr			
	210	215	220
Leu Ser Trp Ala Pro Lys Asp Lys Ser Ser Arg Lys Asn Val Leu Glu			
225	230	235	240
Leu Arg Ser Arg Asp Gly Ser Glu Tyr Leu Ile Gln His Asp Ser Glu			
	245	250	255
Ala Ile Ile Ser Thr Trp His Lys Ala Ile Ala Gln Gly Ile Gln Glu			
	260	265	270
Leu Ser Ala Glu Leu Pro Pro Glu Glu Ser Glu Ser Ser Arg Val Asp			
	275	280	285
Phe Gly Ser Ser Glu Arg Leu Gly Ser Trp Gln Glu Lys Glu Glu Asp			
	290	295	300
Ala Arg Pro Asn Ala Ala Ala Pro Ala Leu Gly Pro Val Gly Leu Glu			
305	310	315	320
Ser Asp Leu Ser Lys Val Arg His Lys Leu Arg Lys Phe Leu Gln Arg			
	325	330	335
Arg Pro Thr Leu Gln Ser Leu Arg Glu Lys Gly Tyr Ile Lys Asp Gln			
	340	345	350
Val Phe Gly Cys Ala Leu Ala Ala Leu Cys Glu Arg Glu Arg Ser Arg			
	355	360	365
Val Pro Arg Phe Val Gln Gln Cys Ile Arg Ala Val Glu Ala Arg Gly			
	370	375	380
Leu Asp Ile Asp Gly Leu Tyr Arg Ile Ser Gly Asn Leu Ala Thr Ile			
385	390	395	400
Gln Lys Leu Arg Tyr Lys Val Asp His Asp Glu Arg Leu Asp Leu Asp			
	405	410	415
Asp Gly Arg Trp Glu Asp Val His Val Ile Thr Gly Ala Leu Lys Leu			
	420	425	430
Phe Phe Arg Glu Leu Pro Glu Pro Leu Phe Pro Phe Ser His Phe Arg			

435                      440                      445  
 Gln Phe Ile Ala Ala Ile Lys Leu Gln Asp Gln Ala Arg Arg Ser Arg  
 450                      455                      460  
 Cys Val Arg Asp Leu Val Arg Ser Leu Pro Ala Pro Asn His Asp Thr  
 465                      470                      475                      480  
 Leu Arg Met Leu Phe Gln His Leu Cys Arg Val Ile Glu His Gly Glu  
                          485                      490                      495  
 Gln Asn Arg Met Ser Val Gln Ser Val Ala Ile Val Phe Gly Pro Thr  
                          500                      505                      510  
 Leu Leu Arg Pro Glu Val Glu Glu Thr Ser Met Pro Met Thr Met Val  
                          515                      520                      525  
 Phe Gln Asn Gln Val Val Glu Leu Ile Leu Gln Gln Cys Ala Asp Ile  
                          530                      535                      540  
 Phe Pro Pro His  
 545

<210> 3397

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3397

Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu  
   1                      5                      10                      15  
 Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser  
                          20                      25                      30  
 Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu  
                          35                      40                      45  
 Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr  
                          50                      55                      60  
 Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro  
   65                      70                      75                      80  
 Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu  
                          85                      90                      95  
 Ser Gly Lys Glu Val Ser Thr His Trp Ala Gly Gly Trp Ala Gly Trp

100 105 110  
 Leu Leu Ala Glu Cys Ser  
 115

<210> 3398

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3398

Met Pro Gly Ala Glu Met Trp Thr Glu Gly Asp Phe Ser Ala Ser Leu  
 1 5 10 15  
 Ala Gly Ala Cys Ser Lys Leu Ala Asp Ala Leu Cys Ala Cys Trp Ala  
 20 25 30  
 Arg Ser Pro Ser Ser Gly Glu Ala Leu Gly Leu Glu Gln Leu Gly Leu  
 35 40 45  
 Ser Trp Leu Leu Thr Pro Glu Pro Gly Ser Leu Leu Val Leu His Tyr  
 50 55 60  
 Leu Ala Thr Ser Ala Gln Gly Pro Asp Lys Arg Tyr Cys Leu Arg Ala  
 65 70 75 80  
 Thr Glu Asp Thr Gly Ala Gln Ser Trp Thr Thr Gly Pro Gly Pro Gly  
 85 90 95  
 Arg Thr Arg Arg Ser Arg Pro Ser Ala Ala Leu Trp Gly Arg Ser Pro  
 100 105 110  
 Trp Gly Cys  
 115

<210> 3399

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3399

Met Leu Gln Phe Pro Gly Phe Leu Val Leu Ile Ile Pro Pro Arg Ser

1	5	10	15												
Cys	Leu	Leu	Gln	Arg	Ser	Thr	Val	Gln	Gln	Glu	Ala	Glu	Pro	Met	Pro
	20		25		30										
Leu	Arg	Gly	Trp	Arg	Tyr	Cys	Ile	Leu	Pro	Lys	Ile	Pro	Ala	Ser	His
	35		40		45										
Ser	Asn	Asn	Glu	Pro	Asn	Ser	Ala	Glu	Glu	Leu	Trp	Ala	Val	Val	Ser
	50		55		60										
Lys	Thr	Gln	Ala	Tyr	Ser	Leu	Pro	Pro	Leu	Pro	Phe	Leu	Phe	Arg	Pro
	65		70		75										80
Val	Leu	Thr	Lys	Arg	Ile	Leu	Ala	Leu	Gln	Ile	Val	Leu	Tyr	Phe	Asp
		85			90										95
Ala	Phe	Arg	Ile	Asn	Ile										
	100														

&lt;210&gt; 3400

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3400

Met	Glu	Val	Val	Val	Ile	His	Ser	Ser	Pro	Met	Ser	Arg	Arg	Arg	Tyr
1	5	10	15												
Ser	Phe	Leu	His	Leu	Trp	Glu	Cys	Gly	Ser	Gly	Trp	Leu	Pro	Val	Asp
	20		25		30										
Ser	Pro	Pro	Arg	Thr	Gly	Leu	Gly	His	Arg	Cys	Cys	Leu	Ala	Gln	Gly
	35		40		45										
His	Val	Pro	Ser	Pro	Arg	Ser	Ser	His	Thr	Lys	Trp	Leu	Ser	Cys	Val
	50		55		60										
His	Gln	Gly	Ser	Thr	Thr	Leu	Gly	Ala	Thr	Thr	Ala	Pro	Gly	Leu	Pro
	65		70		75										80
Val	Gly	Trp	Leu	Gly	Pro	Leu	Leu	Cys	Met	His	His	Ser	Pro	Thr	Ser
		85			90										95
Leu	Gly	Pro	Ile	Leu	Lys	Ala	Val	Leu	His	Lys	Ala	Phe	Thr	Cys	Asn
	100		105		110										
Leu	Arg	Ala	Ser	Glu	Ser	Val	Pro	Trp	Gly	Ser					

115

120

&lt;210&gt; 3401

&lt;211&gt; 443

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3401

```

Met Gly Ser Pro Ala His Arg Pro Ala Leu Leu Leu Leu Leu Pro Pro
  1             5             10             15
Leu Leu Leu Leu Leu Leu Arg Val Pro Pro Ser Arg Ser Phe Pro Asp
      20             25             30
Thr Pro Trp Cys Ser Pro Ile Lys Val Lys Tyr Gly Asp Val Tyr Cys
      35             40             45
Arg Ala Pro Gln Gly Gly Tyr Tyr Lys Thr Ala Leu Gly Thr Arg Cys
      50             55             60
Asp Ile Arg Cys Gln Lys Gly Tyr Glu Leu His Gly Ser Ser Leu Leu
      65             70             75             80
Ile Cys Gln Ser Asn Lys Arg Trp Ser Asp Lys Val Ile Cys Lys Gln
      85             90             95
Lys Arg Cys Pro Thr Leu Ala Met Pro Ala Asn Gly Gly Phe Lys Cys
      100            105            110
Val Asp Gly Ala Tyr Phe Asn Ser Arg Cys Glu Tyr Tyr Cys Ser Pro
      115            120            125
Gly Tyr Thr Leu Lys Gly Glu Arg Thr Val Thr Cys Met Asp Asn Lys
      130            135            140
Ala Trp Ser Gly Arg Pro Ala Ser Cys Val Asp Met Glu Pro Pro Arg
      145            150            155            160
Ile Lys Cys Pro Ser Val Lys Glu Arg Ile Ala Glu Pro Asn Lys Leu
      165            170            175
Thr Val Arg Val Ser Trp Glu Thr Pro Glu Gly Arg Asp Thr Ala Asp
      180            185            190
Gly Ile Leu Thr Asp Val Ile Leu Lys Gly Leu Pro Pro Gly Ser Asn
      195            200            205
Phe Pro Glu Gly Asp His Lys Ile Gln Tyr Thr Val His Asp Arg Ala

```



210	215	220	
Glu Asn Lys Gly Thr Cys Lys Phe Arg Val Lys Val Arg Val Lys Arg			
225	230	235	240
Cys Gly Lys Leu Asn Ala Pro Glu Asn Gly Tyr Met Lys Cys Ser Ser			
245	250	255	
Asp Gly Asp Asn Tyr Gly Ala Thr Cys Glu Phe Ser Cys Ile Gly Gly			
260	265	270	
Tyr Glu Leu Gln Gly Ser Pro Ala Arg Val Cys Gln Ser Asn Leu Ala			
275	280	285	
Trp Ser Gly Thr Glu Pro Thr Cys Ala Ala Met Asn Val Asn Val Gly			
290	295	300	
Val Arg Thr Ala Ala Ala Leu Leu Asp Gln Phe Tyr Glu Lys Arg Arg			
305	310	315	320
Leu Leu Ile Val Ser Thr Pro Thr Ala Arg Asn Leu Leu Tyr Arg Leu			
325	330	335	
Gln Leu Gly Met Leu Gln Gln Ala Gln Cys Gly Leu Asp Leu Arg His			
340	345	350	
Ile Thr Val Val Glu Leu Val Gly Val Phe Pro Thr Leu Ile Gly Arg			
355	360	365	
Ile Gly Ala Lys Ile Met Pro Pro Ala Leu Ala Leu Gln Leu Arg Leu			
370	375	380	
Leu Leu Arg Ile Pro Leu Tyr Ser Phe Ser Met Val Leu Val Asp Lys			
385	390	395	400
His Gly Met Asp Lys Glu Arg Tyr Val Ser Leu Val Met Pro Val Ala			
405	410	415	
Leu Phe Asn Leu Ile Asp Thr Phe Pro Leu Arg Lys Glu Glu Met Val			
420	425	430	
Leu Gln Ala Glu Met Ser Gln Thr Cys Asn Thr			
435	440		

&lt;210&gt; 3402

&lt;211&gt; 555

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3402

Met Gly Lys Trp Arg Pro Gly Gln Gly His Thr Thr Gly Ser Val Lys  
 1 5 10 15  
 Pro Leu Ser Arg Ser Asp Ala Met Glu Leu Asp Leu Ser Pro Pro His  
 20 25 30  
 Leu Ser Ser Ser Pro Glu Asp Leu Cys Pro Ala Pro Gly Thr Pro Pro  
 35 40 45  
 Gly Thr Pro Arg Pro Pro Asp Thr Pro Leu Pro Glu Glu Val Lys Arg  
 50 55 60  
 Ser Gln Pro Leu Leu Ile Pro Thr Thr Gly Arg Lys Leu Arg Glu Glu  
 65 70 75 80  
 Glu Arg Arg Ala Thr Ser Leu Pro Ser Ile Pro Asn Pro Phe Pro Glu  
 85 90 95  
 Leu Cys Ser Pro Pro Ser Gln Ser Pro Ile Leu Gly Gly Pro Ser Ser  
 100 105 110  
 Ala Arg Gly Leu Leu Pro Arg Asp Ala Ser Arg Pro His Val Val Lys  
 115 120 125  
 Val Tyr Ser Glu Asp Gly Ala Cys Arg Ser Val Glu Val Ala Thr Gly  
 130 135 140  
 Ala Thr Ala Arg His Val Cys Glu Met Leu Val Gln Arg Ala His Ala  
 145 150 155 160  
 Leu Ser Asp Glu Thr Trp Gly Leu Val Glu Cys His Pro His Leu Ala  
 165 170 175  
 Leu Glu Arg Gly Leu Glu Asp His Glu Ser Val Val Glu Val Gln Ala  
 180 185 190  
 Ala Trp Pro Val Gly Gly Asp Ser Arg Phe Val Phe Arg Lys Asn Phe  
 195 200 205  
 Ala Lys Tyr Glu Leu Phe Lys Ser Ser Pro His Ser Leu Phe Pro Glu  
 210 215 220  
 Lys Met Val Ser Ser Cys Leu Asp Ala His Thr Gly Ile Ser His Glu  
 225 230 235 240  
 Asp Leu Ile Gln Asn Phe Leu Asn Ala Gly Ser Phe Pro Glu Ile Gln  
 245 250 255  
 Gly Phe Leu Gln Leu Arg Gly Ser Gly Arg Lys Leu Trp Lys Arg Phe  
 260 265 270  
 Phe Cys Phe Leu Arg Arg Ser Gly Leu Tyr Tyr Ser Thr Lys Gly Thr

275	280	285
Ser Lys Asp Pro Arg His Leu Gln Tyr Val Ala Asp Val Asn Glu Ser		
290	295	300
Asn Val Tyr Val Val Thr Gln Gly Arg Lys Leu Tyr Gly Met Pro Thr		
305	310	315
Asp Phe Gly Phe Cys Val Lys Pro Asn Lys Leu Arg Asn Gly His Lys		
325	330	335
Gly Leu Arg Ile Phe Cys Ser Glu Asp Glu Gln Ser Arg Thr Cys Trp		
340	345	350
Leu Ala Ala Phe Arg Leu Phe Lys Tyr Gly Val Gln Leu Tyr Lys Asn		
355	360	365
Tyr Gln Gln Ala Gln Ser Arg His Leu His Pro Ser Cys Leu Gly Ser		
370	375	380
Pro Pro Leu Arg Ser Ala Ser Asp Asn Thr Leu Val Ala Met Asp Phe		
385	390	395
Ser Gly His Ala Gly Arg Val Ile Glu Asn Pro Arg Glu Ala Leu Ser		
405	410	415
Val Ala Leu Glu Glu Ala Gln Ala Trp Arg Lys Lys Thr Asn His Arg		
420	425	430
Leu Ser Leu Pro Met Pro Ala Ser Gly Thr Ser Leu Ser Ala Ala Ile		
435	440	445
His Arg Thr Gln Leu Trp Phe His Gly Arg Ile Ser Arg Glu Glu Ser		
450	455	460
Gln Arg Leu Ile Gly Gln Gln Gly Leu Val Asp Gly Leu Phe Leu Val		
465	470	475
Arg Glu Ser Gln Arg Asn Pro Gln Gly Phe Val Leu Ser Leu Cys His		
485	490	495
Leu Gln Lys Val Lys His Tyr Leu Ile Leu Pro Ser Glu Glu Glu Gly		
500	505	510
Arg Leu Tyr Phe Ser Met Asp Asp Gly Gln Thr Arg Phe Thr Asp Leu		
515	520	525
Leu Gln Leu Val Glu Phe His Gln Leu Asn Arg Gly Ile Leu Pro Cys		
530	535	540
Leu Leu Arg His Cys Cys Thr Arg Val Ala Leu		
545	550	555

&lt;210&gt; 3403

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3403

```

Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu
  1             5             10            15
Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr
      20             25            30
Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu
      35             40            45
Asp Leu Gly Tyr Leu Ala Glu Glu Ile Ser Lys Gln Gln Ser Val Gln
      50             55            60
Asp Val Ala Trp Leu Leu Leu Val Val Cys Ala His Ile Cys Glu Gln
      65             70            75            80
Arg His Asp Lys Lys Leu Glu Leu Ile Phe Lys Lys Glu Ala Glu Cys
      85             90            95
Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys Lys
      100            105            110
Asn His Phe Leu Glu Arg Asn Ser Ser
      115            120

```

&lt;210&gt; 3404

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3404

```

Met Pro Leu His Thr Leu Leu Ile Phe Pro Val Met Ser Ser Gly Ala
  1             5             10            15
Leu Leu Leu Ala Val Ala Tyr Lys Ala Ser Trp Ser Gly Ser Lys Ala
      20             25            30
Trp Gln Ser Leu Ser Gln Gly Lys Leu Gln Ala Ala Asn Ser Pro His

```

$\langle 211 \rangle$  120

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3405

Met	Thr	Arg	Gly	Thr	Gln	Gly	Leu	Pro	Met	Thr	Met	Gly	Pro	Arg	Gly
1				5					10					15	
Arg	His	Leu	Ala	Gln	Gly	Pro	Val	Leu	Glu	Thr	Asp	Asp	Pro	Arg	Arg
			20						25					30	
Arg	Arg	Gln	Gly	Arg	Arg	Glu	Ala	Gly	Arg	Ala	Gly	Met	Val	Ser	Gln
			35					40					45		
Ala	Glu	Gly	Arg	Thr	Arg	Thr	Arg	Met	Glu	Leu	Gly	Asn	Asp	Pro	Gly
			50				55					60			
Val	Phe	Gly	Gly	Cys	Arg	Trp	Val	Arg	Met	Ala	Val	Gln	Gly	Gly	Lys
			65			70				75				80	
Gly	Cys	Val	Ala	Gly	Glu	Gln	Pro	Gly	Glu	Ala	Gln	Thr	Leu	Leu	Lys
				85					90					95	
Arg	Cys	Leu	Leu	Cys	Arg	Pro	Pro	His	Pro	Leu	Pro	Ala	Pro	Ser	Gly
			100						105				110		
Ala	Pro	Ala	Pro	Pro	Cys	Ser	Ala								
			115					120							

<210> 3406

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3406

```

Met Arg Glu Val Gly Glu Ala Arg Glu Ala His Gly Ala Pro Ala Gln
  1             5             10            15
Ala Pro His Thr Pro Ser Val Val Thr Val Ala His Glu Val Asn Ser
      20             25            30
Pro Pro Pro Leu Gly Glu Lys Glu Ala Ala Trp Ala Ala Thr Cys Ser
      35             40            45
Pro Ala Leu Pro Pro Pro Thr Ala Leu Met Asp Pro Ser Leu Pro Gly
      50             55            60
Gly His Cys Phe Val Gly Phe Ser Pro Phe Val Gly Lys Gly Arg Cys
      65             70            75            80
Pro Ala Gly Leu Gly Leu Val Arg Glu Glu Ser Arg Ala Leu Glu Arg
      85             90            95
Gly Ala Gln His
      100

```

&lt;210&gt; 3407

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3407

```

Met Ala Ser Leu Leu Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu
  1             5             10            15
Val His Gly Asp Val Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val
      20             25            30
Arg Ala Leu Ile Asn Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu
      35             40            45
Val Cys Tyr Ile Cys Lys Ile Thr Lys Met Ser Ser Ala Asn Val Tyr
      50             55            60
Leu Glu Ser Lys Gly Met Ser Leu Cys Gln Thr Val Val Val Gly Ser

```

65                      70                      75                      80  
 Val Val Ile Leu Leu Tyr Ser Ser Arg Ala Cys Tyr Asn Leu Val Val  
                          85                      90                      95  
 Val Thr Ile Ser Gln Asp Thr Leu Glu Ser Pro Phe Asn Tyr Gly Trp  
                          100                      105                      110  
 Asp Asn Leu Ser Asp Lys Ala His Val Glu Asp Ile Ser Gly Glu Glu  
                          115                      120                      125  
 Tyr Ile Val Phe Gly Met Val Leu Phe Leu Trp Glu His Val Pro Ala  
                          130                      135                      140  
 Trp Ser Val Val Leu Phe Phe Arg Ala Gln Arg Leu Asn Gln Asn Leu  
 145                      150                      155                      160  
 Ala Pro Ala Gly Met Ile Asn Ser His Ser Tyr Ser Ser Arg Ala Tyr  
                          165                      170                      175  
 Phe Phe Asp Asn Pro Arg Arg Tyr Asp Ser Asp Asp Asp Leu Pro Arg  
                          180                      185                      190  
 Leu Gly Ser Ser Arg Glu Gly Ser Leu Pro Asn Ser Gln Ser Leu Gly  
                          195                      200                      205  
 Trp Tyr Gly Thr Met Thr Gly Cys Gly Ser Ser Ser Tyr Thr Val Thr  
                          210                      215                      220  
 Pro His Leu Asn Gly Pro Met Thr Asp Thr Ala Pro Leu Leu Phe Thr  
 225                      230                      235                      240  
 Cys Ser Asn Leu Asp Leu Asn Asn His His Ser Leu Tyr Val Thr Pro  
                          245                      250                      255  
 Gln Asn

<210> 3408

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3408

Met Ser Ala Thr Leu Arg Glu Arg Leu Arg Lys Thr Arg Phe Ser Phe  
   1                      5                      10                      15  
 Asn Ser Ser Tyr Asn Val Val Lys Arg Leu Lys Val Glu Ser Glu Glu

20 25 30  
 Asn Asp Gln Thr Phe Ser Glu Lys Pro Ala Ser Ser Thr Glu Glu Asn  
 35 40 45  
 Cys Leu Glu Phe Gln Glu Ser Phe Lys His Ile Asp Ser Glu Phe Glu  
 50 55 60  
 Glu Asn Thr Asn Leu Lys Asn Thr Leu Lys Asn Leu Asn Val Cys Glu  
 65 70 75 80  
 Ser Gln Ser Leu Asp Ser Gly Ser Cys Ser Ala Leu Gln Asn Glu Phe  
 85 90 95  
 Val Ser Glu Lys Leu Pro Lys Gln Arg Leu Asn Ala Glu Lys Ala Lys  
 100 105 110  
 Leu Val Lys Gln Val Gln Glu Lys Glu Asp Leu Leu Arg Arg Leu Lys  
 115 120 125  
 Leu Val Lys Met Tyr Arg Ser Lys Asn Asp Leu Ser Gln Leu Gln Leu  
 130 135 140  
 Leu Ile Lys Lys Trp Arg Ser Cys Ser Gln Leu Leu Leu Tyr Glu Leu  
 145 150 155 160  
 Gln Ser Ala Val Ser Glu Glu Asn Lys Lys Leu Ser Leu Thr Gln Leu  
 165 170 175  
 Ile Asp His Tyr Gly Leu Asp Asp Arg Leu Leu His Tyr Asn Arg Ser  
 180 185 190  
 Glu Glu Glu Phe Ile Asp Val  
 195

<210> 3409

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3409

Met Pro Lys Gly Gly Cys Pro Lys Ala Pro Gln Gln Glu Glu Leu Pro  
 1 5 10 15  
 Leu Ser Ser Asp Met Val Glu Lys Gln Thr Gly Lys Lys Asp Lys Asp  
 20 25 30  
 Lys Val Ser Leu Thr Lys Thr Pro Lys Leu Glu Arg Gly Asp Gly Gly



&lt;211&gt; 148

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3410

Met	Pro	Phe	Ala	Glu	Asp	Lys	Thr	Tyr	Lys	Tyr	Ile	Cys	Arg	Asn	Phe
1				5					10					15	
Ser	Asn	Phe	Cys	Asn	Val	Asp	Val	Val	Glu	Ile	Leu	Pro	Tyr	Leu	Pro
			20						25					30	
Cys	Leu	Thr	Ala	Arg	Asp	Gln	Asp	Arg	Leu	Arg	Ala	Thr	Cys	Thr	Leu
			35					40					45		
Ser	Gly	Asn	Arg	Asp	Thr	Leu	Trp	His	Leu	Phe	Asn	Thr	Leu	Gln	Leu
	50						55				60				
Pro	Thr	Trp	Ala	Gly	Glu	Glu	Thr	Pro	Gly	Gly	Gln	Ser	Ser	Gly	Arg
65					70					75					80
Gly	Leu	Asp	Phe	Ser	Ser	Leu	Thr	Ser	Gly	Ala	Val	Trp	Leu	Trp	Gln
				85						90					95
Met	Ser	Asp	Phe	Trp	Ser	Cys	Phe	Ser	Thr	Trp	Thr	Val	Ser	Ile	Trp
			100						105					110	
Leu	Ile	Leu	His	Trp	Val	Leu	Leu	Arg	Leu	Asn	Leu	Gln	Val	Phe	Ala
			115					120					125		

Lys Cys Leu Ala Gln Ser Lys Trp Pro Leu Leu Leu Pro Ser Leu Ser  
 130 135 140  
 Cys Pro Thr Trp  
 145

<210> 3411  
 <211> 527  
 <212> PRT  
 <213> Homo sapiens

<400> 3411  
 Met Leu Ala Lys Pro His Gln Arg Leu Thr Lys Tyr Pro Leu Leu Leu  
 1 5 10 15  
 Lys Ser Val Leu Arg Lys Thr Glu Glu Pro Arg Ala Lys Glu Ala Val  
 20 25 30  
 Val Ala Met Ile Gly Ser Val Glu Arg Phe Ile His His Val Asn Ala  
 35 40 45  
 Cys Met Arg Gln Arg Gln Glu Arg Gln Arg Leu Ala Ala Val Val Ser  
 50 55 60  
 Arg Ile Asp Ala Tyr Glu Val Val Glu Ser Ser Ser Asp Glu Val Asp  
 65 70 75 80  
 Lys Leu Leu Lys Glu Phe Leu His Leu Asp Leu Thr Ala Pro Ile Pro  
 85 90 95  
 Gly Ala Ser Pro Glu Glu Thr Arg Gln Leu Leu Leu Glu Gly Ser Leu  
 100 105 110  
 Arg Met Lys Glu Gly Lys Asp Ser Lys Met Asp Val Tyr Cys Phe Leu  
 115 120 125  
 Phe Thr Asp Leu Leu Leu Val Thr Lys Ala Val Lys Lys Ala Glu Arg  
 130 135 140  
 Thr Arg Val Ile Arg Pro Pro Leu Leu Val Asp Lys Ile Val Cys Arg  
 145 150 155 160  
 Glu Leu Arg Asp Pro Gly Ser Phe Leu Leu Ile Tyr Leu Asn Glu Phe  
 165 170 175  
 His Ser Ala Val Gly Ala Tyr Thr Phe Gln Ala Ser Gly Gln Ala Leu  
 180 185 190

Cys Arg Gly Trp Val Asp Thr Ile Tyr Asn Ala Gln Asn Gln Leu Gln  
 195 200 205  
 Gln Leu Arg Ala Gln Glu Pro Pro Gly Ser Gln Gln Pro Leu Gln Ser  
 210 215 220  
 Leu Glu Glu Glu Glu Asp Glu Gln Glu Glu Glu Glu Glu Glu Glu  
 225 230 235 240  
 Glu Glu Glu Glu Gly Glu Asp Ser Gly Thr Ser Ala Ala Ser Ser Pro  
 245 250 255  
 Thr Ile Met Arg Lys Ser Ser Gly Ser Pro Asp Ser Gln His Cys Ala  
 260 265 270  
 Ser Asp Gly Ser Thr Glu Thr Leu Ala Met Val Val Val Glu Pro Gly  
 275 280 285  
 Asp Thr Leu Ser Ser Pro Glu Phe Asp Ser Gly Pro Phe Ser Ser Gln  
 290 295 300  
 Ser Asp Glu Thr Ser Leu Ser Thr Thr Ala Ser Ser Ala Thr Pro Thr  
 305 310 315 320  
 Ser Glu Leu Leu Pro Leu Gly Pro Val Asp Gly Arg Ser Cys Ser Met  
 325 330 335  
 Asp Ser Ala Tyr Gly Thr Leu Ser Pro Thr Ser Leu Gln Asp Phe Val  
 340 345 350  
 Ala Pro Gly Pro Met Ala Glu Leu Val Pro Arg Ala Pro Glu Ser Pro  
 355 360 365  
 Arg Val Pro Ser Pro Pro Pro Ser Pro Arg Leu Arg Arg Arg Thr Pro  
 370 375 380  
 Val Gln Leu Leu Ser Cys Pro Pro His Leu Leu Lys Ser Lys Ser Glu  
 385 390 395 400  
 Ala Ser Leu Leu Gln Leu Leu Ala Gly Ala Gly Thr His Gly Thr Pro  
 405 410 415  
 Ser Ala Pro Ser Arg Ser Leu Ser Glu Leu Cys Leu Ala Val Pro Ala  
 420 425 430  
 Pro Gly Ile Arg Thr Gln Gly Ser Pro Gln Glu Ala Gly Pro Ser Trp  
 435 440 445  
 Asp Cys Arg Gly Ala Pro Ser Pro Gly Ser Gly Pro Gly Leu Val Gly  
 450 455 460  
 Cys Leu Ala Gly Glu Pro Ala Gly Ser His Arg Lys Arg Cys Gly Asp  
 465 470 475 480

Leu Pro Ser Gly Ala Ser Pro Arg Val Gln Pro Glu Pro Pro Pro Gly  
                     485                    490                    495  
 Val Ser Ala Gln His Arg Lys Leu Thr Leu Ala Gln Leu Tyr Arg Ile  
                     500                    505                    510  
 Arg Thr Thr Leu Leu Leu Asn Ser Thr Leu Thr Ala Ser Glu Val  
                     515                    520                    525

<210> 3412

<211> 632

<212> PRT

<213> Homo sapiens

<400> 3412

Met Trp Leu Lys Pro Glu Glu Val Leu Leu Lys Asn Ala Leu Lys Leu  
   1                    5                    10                    15  
 Trp Leu Met Glu Arg Ser Asn Asp Tyr Phe Val Leu Gln Arg Arg Arg  
                     20                    25                    30  
 Gly Tyr Gly Glu Glu Gly Gly Gly Gly Leu Thr Gly Leu Leu Val Gly  
                     35                    40                    45  
 Thr Leu Asp Ser Val Leu Asp Ser Thr Ala Lys Val Ala Pro Phe Arg  
   50                    55                    60  
 Ile Leu His Gln Thr Pro Asp Ser Gln Val Tyr Leu Ser Ile Ala Cys  
   65                    70                    75                    80  
 Gly Ala Asn Arg Glu Glu Ile Thr Lys His Trp Asp Trp Leu Glu Gln  
                     85                    90                    95  
 Asn Ile Met Lys Thr Leu Ser Val Phe Asp Ser Asn Glu Asp Ile Thr  
                     100                    105                    110  
 Asn Phe Val Gln Gly Lys Ile Arg Gly Leu Ile Ala Glu Glu Gly Lys  
                     115                    120                    125  
 His Cys Phe Ala Lys Glu Asp Asp Pro Glu Lys Phe Arg Glu Ala Leu  
                     130                    135                    140  
 Leu Lys Phe Glu Lys Cys Phe Gly Leu Pro Glu Lys Glu Lys Leu Val  
   145                    150                    155                    160  
 Thr Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Arg Val Pro Cys Gln Gly  
                     165                    170                    175

Trp Leu Tyr Leu Ser Thr Asn Phe Leu Ser Phe Tyr Ser Phe Leu Leu  
 180 185 190  
 Gly Ser Glu Ile Lys Leu Ile Ile Ser Trp Asp Glu Val Ser Lys Leu  
 195 200 205  
 Glu Lys Thr Ser Asn Val Ile Leu Thr Glu Ser Ile His Val Cys Ser  
 210 215 220  
 Gln Gly Glu Asn His Tyr Phe Ser Met Phe Leu His Ile Asn Gln Thr  
 225 230 235 240  
 Tyr Leu Leu Met Glu Gln Leu Ala Asn Tyr Ala Ile Arg Arg Leu Phe  
 245 250 255  
 Asp Lys Glu Thr Phe Asp Asn Asp Pro Val Leu Tyr Asn Pro Leu Gln  
 260 265 270  
 Ile Thr Lys Arg Gly Leu Glu Asn Arg Ala His Ser Glu Gln Phe Asn  
 275 280 285  
 Ala Phe Phe Arg Leu Pro Lys Gly Glu Ser Leu Lys Glu Val His Glu  
 290 295 300  
 Cys Phe Leu Trp Val Pro Phe Ser His Phe Asn Thr His Gly Lys Met  
 305 310 315 320  
 Cys Ile Ser Glu Asn Tyr Ile Cys Phe Ala Ser Gln Asp Gly Asn Gln  
 325 330 335  
 Cys Ser Val Ile Ile Pro Leu Arg Glu Val Leu Ala Ile Asp Lys Thr  
 340 345 350  
 Asn Asp Ser Ser Lys Ser Val Ile Ile Ser Ile Lys Gly Lys Thr Ala  
 355 360 365  
 Phe Arg Phe His Glu Val Lys Asp Phe Glu Gln Leu Val Ala Lys Leu  
 370 375 380  
 Arg Leu Arg Cys Gly Ala Ala Ser Thr Gln Tyr His Asp Ile Ser Thr  
 385 390 395 400  
 Glu Leu Ala Ile Ser Ser Glu Ser Thr Glu Pro Ser Asp Asn Phe Glu  
 405 410 415  
 Val Gln Ser Leu Thr Ser Gln Arg Glu Cys Ser Lys Thr Val Asn Thr  
 420 425 430  
 Glu Ala Leu Met Thr Val Phe His Pro Gln Asn Leu Glu Thr Leu Asn  
 435 440 445  
 Ser Lys Met Leu Lys Glu Lys Met Lys Glu Gln Ser Trp Lys Ile Leu  
 450 455 460

Phe Ala Glu Cys Gly Arg Gly Val Ser Met Phe Arg Thr Lys Lys Thr  
 465                                      470                                      475                                      480  
 Arg Asp Leu Val Val Arg Gly Ile Pro Glu Thr Leu Arg Gly Glu Leu  
    485                                      490                                      495  
 Trp Met Leu Phe Ser Gly Val Val Asn Asp Met Ala Thr Asn Pro Asp  
    500                                      505                                      510  
 Tyr Tyr Thr Glu Val Val Glu Gln Ser Leu Gly Thr Cys Asn Leu Ala  
    515                                      520                                      525  
 Thr Glu Glu Ile Glu Arg Asp Leu Arg Arg Ser Leu Pro Glu His Pro  
    530                                      535                                      540  
 Ala Phe Gln Ser Asp Thr Gly Ile Ser Ala Leu Arg Arg Val Leu Thr  
 545                                      550                                      555                                      560  
 Ala Tyr Ala Tyr Arg Asn Pro Lys Ile Gly Tyr Cys Gln Ala Met Asn  
    565                                      570                                      575  
 Ile Leu Thr Ser Val Leu Leu Leu Tyr Ala Lys Glu Glu Glu Ala Phe  
    580                                      585                                      590  
 Trp Leu Leu Val Ala Val Cys Glu Arg Met Leu Pro Asp Tyr Phe Asn  
    595                                      600                                      605  
 Arg Arg Ile Ile Gly Ser Asp Asp Phe Met Pro Leu Val Arg Ile Gln  
    610                                      615                                      620  
 Gly Gln Cys Val Ile Gly Glu Lys  
 625                                      630

<210> 3413

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3413

Met Gly Leu Met Met Val Gly Val Leu Ile Gly Thr Phe Ile Ala His  
   1                                      5                                      10                                      15  
 Val Val Cys Lys Arg Leu Leu Thr Ala Trp Val Ala Ala Arg Ile Gln  
    20                                      25                                      30  
 Ser Ser Glu Lys Leu Ser Ala Val Ile Arg Val Val Glu Gly Gly Ser

35                      40                      45  
 Gly Leu Lys Val Val Ala Leu Ala Arg Leu Thr Pro Ile Pro Phe Gly  
 50                      55                      60  
 Leu Gln Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr  
 65                      70                      75                      80  
 Leu Met Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser  
 85                      90                      95  
 Tyr Leu Gly Thr Thr Leu Arg Thr Met Glu Asp Val Ile Ala Glu Gln  
 100                      105                      110  
 Ser Val Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ile Ser Ile  
 115                      120                      125  
 Gly Leu Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala  
 130                      135                      140  
 Ala Ile Val Ala Cys Glu Met Glu Leu Lys Ser Ser Leu Val Lys Gly  
 145                      150                      155                      160  
 Asn Gln Pro Asn Thr Ser Gly Ser Ser Phe Tyr Asn Lys Arg Thr Leu  
 165                      170                      175  
 Thr Phe Ser Gly Gly Gly Ile Asn Val Val  
 180                      185

<210> 3414

<211> 156

<212> PRT

<213> Homo sapiens

<400> 3414

Met Gln Val Pro Pro Leu Tyr Ser Ala Leu Lys Lys Asp Gly Gln Arg  
 1                      5                      10                      15  
 Leu Ser Thr Leu Met Lys Arg Gly Glu Val Val Glu Ala Lys Pro Ala  
 20                      25                      30  
 Arg Pro Val Thr Val Tyr Ser Ile Ser Leu Gln Lys Phe Gln Pro Pro  
 35                      40                      45  
 Phe Phe Thr Leu Asp Val Glu Cys Gly Gly Gly Phe Tyr Ile Arg Ser  
 50                      55                      60  
 Leu Val Ser Asp Ile Gly Lys Glu Leu Ser Ser Cys Ala Asn Val Leu

65                      70                      75                      80  
 Glu Leu Thr Arg Thr Lys Gln Gly Pro Phe Thr Leu Glu Glu His Ala  
                          85                      90                      95  
 Leu Pro Glu Asp Lys Trp Thr Ile Asp Asp Ile Ala Gln Ser Leu Glu  
                          100                      105                      110  
 His Cys Ser Ser Leu Phe Pro Ala Glu Leu Ala Leu Lys Lys Ser Lys  
                          115                      120                      125  
 Pro Glu Ser Asn Glu Gln Val Leu Ser Cys Glu Tyr Ile Thr Leu Asn  
                          130                      135                      140  
 Glu Pro Lys Arg Glu Asp Asp Val Ile Lys Thr Cys  
 145                      150                      155

<210> 3415

<211> 373

<212> PRT

<213> Homo sapiens

<400> 3415

Met Arg Val Cys Ser Tyr Glu Cys Leu Pro Trp Glu Glu Ala Met Arg  
   1                      5                      10                      15  
 Thr Glu Leu Gln Leu Glu Ser Arg Ser Ser Gly Ser Glu Arg Glu Glu  
                          20                      25                      30  
 Arg Gln Arg Leu Glu Thr Ile Leu Ser Leu Cys Ala Glu Tyr Thr Lys  
                          35                      40                      45  
 Pro Asp Ser Arg Leu Ser Thr Gly Thr Thr Val Glu Asp Val Gln Lys  
                          50                      55                      60  
 Ile Asn Lys Glu Leu Glu Lys Leu Gln Leu Ser Asp Glu Glu Ser Val  
 65                      70                      75                      80  
 Phe Glu Glu Ala Leu Met Ser Pro Asp Thr Arg Tyr Arg Cys His Arg  
                          85                      90                      95  
 Lys Asp Ser Leu Pro Asp Ala Asp Leu Ala Ser Cys Gly Ser Phe Ser  
                          100                      105                      110  
 Gln Ser Ser Ala Ser Phe Phe Thr Pro Arg Ser Thr Arg Asn Asp Glu  
                          115                      120                      125  
 Leu Leu Ser Asp Leu Thr Arg Thr Pro Pro Pro Pro Ser Ser Thr Phe



130	135	140	
Pro Lys Ala Ser Ser Glu Ser Ser Tyr Leu Ser Ile Leu Pro Lys Thr			
145	150	155	160
Pro Glu Gly Ile Ser Glu Glu Gln Arg Ser Gln Glu Leu Ala Ala Met			
	165	170	175
Glu Glu Thr Arg Ile Val Ile Leu Asn Asn Leu Glu Glu Leu Lys Gln			
	180	185	190
Lys Ile Lys Asp Ile Asn Asp Gln Met Asp Glu Ser Phe Arg Glu Leu			
	195	200	205
Asp Met Glu Cys Ala Leu Leu Asp Gly Glu Gln Lys Ser Glu Thr Thr			
	210	215	220
Glu Leu Met Lys Glu Lys Glu Ile Leu Asp His Leu Asn Arg Lys Ile			
225	230	235	240
Ala Glu Leu Glu Lys Asn Ile Val Gly Glu Lys Thr Lys Glu Lys Val			
	245	250	255
Lys Leu Asp Ala Glu Arg Glu Lys Leu Glu Arg Leu Gln Glu Leu Tyr			
	260	265	270
Ser Glu Gln Lys Thr Gln Leu Asp Asn Cys Pro Glu Ser Met Arg Glu			
	275	280	285
Gln Leu Gln Gln Gln Leu Lys Arg Asp Ala Asp Leu Leu Asp Val Glu			
	290	295	300
Ser Lys His Phe Glu Asp Leu Glu Phe Gln Gln Leu Glu His Glu Ser			
305	310	315	320
Arg Leu Asp Glu Glu Lys Glu Asn Leu Thr Gln Gln Leu Leu Arg Glu			
	325	330	335
Val Ala Glu Tyr Gln Arg Asn Ile Val Ser Arg Lys Glu Lys Ile Ser			
	340	345	350
Ala Leu Lys Lys Gln Ala Asn His Ile Val Gln Gln Ala Gln Arg Glu			
	355	360	365
Gln Asp His Phe Val			
370			

&lt;210&gt; 3416

&lt;211&gt; 847

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3416

Met Asn Ala Ser Asn Asp Ile Thr Met Glu Asn Val Val His Glu Leu  
 1 5 10 15  
 Glu Leu Tyr Asn Thr Gly Tyr Tyr Leu Gly Met Phe Met Asn Ser Phe  
 20 25 30  
 Ala Val Phe Gln Glu Cys Gly Leu Trp Val Leu Thr Asp Ala Asn Leu  
 35 40 45  
 Thr Lys Asp Tyr Ile Asp Gly Val Tyr Asp Asn Ala Glu Tyr Ala Glu  
 50 55 60  
 Arg Phe Met Glu Glu Asn Glu Gly His Ile Val Asp Ile His Asp Phe  
 65 70 75 80  
 Ser Leu Gly Ser Ser Pro His Val Arg Lys His Phe Pro Glu Thr Trp  
 85 90 95  
 Ile Trp Leu Asp Thr Asn Met Gly Ser Arg Ile Tyr Gln Glu Phe Glu  
 100 105 110  
 Val Thr Val Pro Asp Ser Ile Thr Ser Trp Val Ala Thr Gly Phe Val  
 115 120 125  
 Ile Ser Glu Asp Leu Gly Leu Gly Leu Thr Thr Thr Pro Val Glu Leu  
 130 135 140  
 Gln Ala Phe Gln Pro Phe Phe Ile Phe Leu Asn Leu Pro Tyr Ser Val  
 145 150 155 160  
 Ile Arg Gly Glu Glu Phe Ala Leu Glu Ile Thr Ile Phe Asn Tyr Leu  
 165 170 175  
 Lys Asp Ala Thr Glu Val Lys Val Ile Ile Glu Lys Ser Asp Lys Phe  
 180 185 190  
 Asp Ile Leu Met Thr Ser Ser Glu Ile Asn Ala Thr Gly His Gln Gln  
 195 200 205  
 Thr Leu Leu Val Pro Ser Glu Asp Gly Ala Thr Val Leu Phe Pro Ile  
 210 215 220  
 Arg Pro Thr His Leu Gly Glu Ile Pro Ile Thr Val Thr Ala Leu Ser  
 225 230 235 240  
 Pro Thr Ala Ser Asp Ala Ile Thr Gln Met Ile Leu Val Lys Ala Glu  
 245 250 255  
 Gly Ile Glu Lys Ser Tyr Ser Gln Ser Ile Leu Leu Asp Leu Thr Asp

260	265	270
Asn Arg Leu Gln Ser Thr Leu Lys Thr Leu Ser Phe Ser Phe Pro Pro		
275	280	285
Asn Thr Val Thr Gly Ser Glu Arg Val Gln Ile Thr Ala Ile Gly Asp		
290	295	300
Val Leu Gly Pro Ser Ile Asn Gly Leu Ala Ser Leu Ile Arg Met Pro		
305	310	315
Tyr Gly Cys Gly Glu Gln Asn Met Ile Asn Phe Ala Pro Asn Ile Tyr		
325	330	335
Ile Leu Asp Tyr Leu Thr Lys Lys Lys Gln Leu Thr Asp Asn Leu Lys		
340	345	350
Glu Lys Ala Leu Ser Phe Met Arg Gln Gly Tyr Gln Arg Glu Leu Leu		
355	360	365
Tyr Gln Arg Glu Asp Gly Ser Phe Ser Ala Phe Gly Asn Tyr Asp Pro		
370	375	380
Ser Gly Ser Thr Trp Leu Ser Ala Phe Val Leu Arg Cys Phe Leu Glu		
385	390	395
Ala Asp Pro Tyr Ile Asp Ile Asp Gln Asn Val Leu His Arg Thr Tyr		
405	410	415
Thr Trp Leu Lys Gly His Gln Lys Ser Asn Gly Glu Phe Trp Asp Pro		
420	425	430
Gly Arg Val Ile His Ser Glu Leu Gln Gly Gly Asn Lys Ser Pro Val		
435	440	445
Thr Leu Thr Ala Tyr Ile Val Thr Ser Leu Leu Gly Tyr Arg Lys Tyr		
450	455	460
Gln Pro Asn Ile Asp Val Gln Glu Ser Ile His Phe Leu Glu Ser Glu		
465	470	475
Phe Ser Arg Gly Ile Ser Asp Asn Tyr Thr Leu Ala Leu Ile Thr Tyr		
485	490	495
Ala Leu Ser Ser Val Gly Ser Pro Lys Ala Lys Glu Ala Leu Asn Met		
500	505	510
Leu Thr Trp Arg Ala Glu Gln Glu Gly Gly Met Gln Phe Trp Val Ser		
515	520	525
Ser Glu Ser Lys Leu Ser Asp Ser Trp Gln Pro Arg Ser Leu Asp Ile		
530	535	540
Glu Val Ala Ala Tyr Ala Leu Leu Ser His Phe Leu Gln Phe Gln Thr		

545                      550                      555                      560  
 Ser Glu Gly Ile Pro Ile Met Arg Trp Leu Ser Arg Gln Arg Asn Ser  
                          565                      570                      575  
 Leu Gly Gly Phe Ala Ser Thr Gln Asp Thr Thr Val Ala Leu Lys Ala  
                          580                      585                      590  
 Leu Ser Glu Phe Ala Ala Leu Met Asn Thr Glu Arg Thr Asn Ile Gln  
                          595                      600                      605  
 Val Thr Val Thr Gly Pro Ser Ser Pro Ser Pro Val Lys Phe Leu Ile  
                          610                      615                      620  
 Asp Thr His Asn Arg Leu Leu Leu Gln Thr Ala Glu Leu Ala Val Val  
 625                      630                      635                      640  
 Gln Pro Thr Ala Val Asn Ile Ser Ala Asn Gly Phe Gly Phe Ala Ile  
                          645                      650                      655  
 Cys Gln Leu Asn Val Val Tyr Asn Val Lys Ala Ser Gly Ser Ser Arg  
                          660                      665                      670  
 Arg Arg Arg Ser Ile Gln Asn Gln Glu Ala Phe Asp Leu Asp Val Ala  
                          675                      680                      685  
 Val Lys Glu Asn Lys Asp Asp Leu Asn His Val Asp Leu Asn Val Cys  
                          690                      695                      700  
 Thr Ser Phe Ser Gly Pro Gly Arg Ser Gly Met Ala Leu Met Glu Val  
 705                      710                      715                      720  
 Asn Leu Leu Ser Gly Phe Met Val Pro Ser Glu Ala Ile Ser Leu Ser  
                          725                      730                      735  
 Glu Thr Val Lys Lys Val Glu Tyr Asp His Gly Lys Leu Asn Leu Tyr  
                          740                      745                      750  
 Leu Asp Ser Val Asn Glu Thr Gln Phe Cys Val Asn Ile Pro Ala Val  
                          755                      760                      765  
 Arg Asn Phe Lys Val Ser Asn Thr Gln Asp Ala Ser Val Ser Ile Val  
                          770                      775                      780  
 Asp Tyr Tyr Glu Pro Arg Arg Gln Ala Val Arg Ser Tyr Asn Ser Glu  
 785                      790                      795                      800  
 Val Lys Leu Ser Ser Cys Asp Leu Cys Ser Asp Val Gln Gly Cys Arg  
                          805                      810                      815  
 Pro Cys Glu Asn Gly Ala Ser Gly Ser His His His Ser Ser Val Ile  
                          820                      825                      830  
 Phe Ile Phe Cys Phe Lys Leu Leu Tyr Phe Met Glu Leu Trp Leu

835

840

845

&lt;210&gt; 3417

&lt;211&gt; 653

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3417

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Met Val Glu Leu Val Asn Ile Glu Pro Val Cys Val Arg Gly Gly Leu
  1              5              10              15
Tyr Glu Val Asp Val Thr Gln Gly Glu Cys Tyr Pro Val Tyr Trp Asn
      20              25              30
Gln Ala Asp Lys Ile Pro Val Met Arg Gly Gln Trp Phe Ile Asp Gly
      35              40              45
Thr Trp Gln Pro Leu Glu Glu Glu Glu Ser Asn Leu Ile Glu Gln Glu
      50              55              60
His Leu Asn Cys Phe Arg Gly Gln Gln Met Gln Glu Asn Phe Asp Ile
      65              70              75              80
Glu Val Ser Lys Ser Ile Asp Gly Lys Asp Ala Val His Ser Phe Lys
      85              90              95
Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu
      100             105             110
Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys
      115             120             125
Leu Gly Phe Ser Lys Ala Ser Ser Ser Gly Thr Arg Leu His Arg Gly
      130             135             140
Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His
      145             150             155             160
Ile Val Phe Val Val His Gly Ile Gly Gln Lys Met Asp Gln Gly Arg
      165             170             175
Ile Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu
      180             185             190
Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val
      195             200             205
Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser Ile

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210	215	220	
Thr Pro Asp Lys Val	Arg Gly Leu Arg Asp Met	Leu Asn Ser Ser Ala	
225	230	235	240
Met Asp Ile Met Tyr Tyr Thr Ser Pro Leu Tyr Arg Asp Glu Leu Val			
	245	250	255
Lys Gly Leu Gln Gln Glu Leu Asn Arg Leu Tyr Ser Leu Phe Cys Ser			
	260	265	270
Arg Asn Pro Asp Phe Glu Glu Lys Gly Gly Lys Val Ser Ile Val Ser			
	275	280	285
His Ser Leu Gly Cys Val Ile Thr Tyr Asp Ile Met Thr Gly Trp Asn			
290	295	300	
Pro Val Arg Leu Tyr Glu Gln Leu Leu Gln Lys Glu Glu Glu Leu Pro			
305	310	315	320
Asp Glu Arg Trp Met Ser Tyr Glu Glu Arg His Leu Leu Asp Glu Leu			
	325	330	335
Tyr Ile Thr Lys Arg Arg Leu Lys Glu Ile Glu Glu Arg Leu His Gly			
	340	345	350
Leu Lys Ala Ser Ser Met Thr Gln Thr Pro Ala Leu Lys Phe Lys Val			
	355	360	365
Glu Asn Phe Phe Cys Met Gly Ser Pro Leu Ala Val Phe Leu Ala Leu			
	370	375	380
Arg Gly Ile Arg Pro Gly Asn Thr Gly Ser Gln Asp His Ile Leu Pro			
385	390	395	400
Arg Glu Ile Cys Asn Arg Leu Leu Asn Ile Phe His Pro Thr Asp Pro			
	405	410	415
Val Ala Tyr Arg Leu Glu Pro Leu Ile Leu Lys His Tyr Ser Asn Ile			
	420	425	430
Ser Pro Val Gln Ile His Trp Tyr Asn Thr Ser Asn Pro Leu Pro Tyr			
	435	440	445
Glu His Met Lys Pro Ser Phe Leu Asn Pro Ala Lys Glu Pro Thr Ser			
	450	455	460
Val Ser Glu Asn Glu Gly Ile Ser Thr Ile Pro Ser Pro Val Thr Ser			
465	470	475	480
Pro Val Leu Ser Arg Arg His Tyr Gly Glu Ser Ile Thr Asn Ile Gly			
	485	490	495
Lys Ala Ser Ile Leu Gly Ala Ala Ser Ile Gly Lys Gly Leu Gly Gly			

500 505 510  
 Met Leu Phe Ser Arg Phe Gly Arg Ser Ser Thr Thr Gln Ser Ser Glu  
 515 520 525  
 Thr Ser Lys Asp Ser Met Glu Asp Glu Lys Lys Pro Val Ala Ser Pro  
 530 535 540  
 Ser Ala Thr Thr Val Gly Thr Gln Thr Leu Pro His Ser Ser Ser Gly  
 545 550 555 560  
 Phe Leu Asp Ser Ala Tyr Phe Arg Leu Gln Glu Ser Phe Phe Asn Leu  
 565 570 575  
 Pro Gln Leu Leu Phe Pro Glu Asn Val Met Gln Asn Lys Asp Asn Ala  
 580 585 590  
 Leu Val Glu Leu Asp His Arg Ile Asp Phe Glu Leu Arg Glu Gly Leu  
 595 600 605  
 Val Glu Ser Arg Tyr Trp Ser Ala Val Thr Ser His Thr Ala Tyr Trp  
 610 615 620  
 Ser Ser Leu Asp Val Ala Leu Phe Leu Leu Thr Phe Met Tyr Lys His  
 625 630 635 640  
 Glu His Asp Asp Asp Ala Lys Pro Asn Leu Asp Pro Ile  
 645 650

<210> 3418

<211> 531

<212> PRT

<213> Homo sapiens

<400> 3418

Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly  
 1 5 10 15  
 Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp  
 20 25 30  
 Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys  
 35 40 45  
 Ile Gln Ser Leu Gln Ile Leu Pro Thr Thr Arg Val Met Ser Ala Glu  
 50 55 60  
 Ile Ala Thr Thr Pro Glu Lys Ala Glu Gly Val Val Lys Leu Gln Asn

65	70	75	80
Leu Thr Leu Pro Thr Asn Ala Ser Ile Lys Phe Asn Pro Gly Ala Glu			
	85	90	95
Ser Val Val Leu Ser Asn Ser Thr Leu Lys Phe Leu Gln Ser Phe Ala			
	100	105	110
Arg Lys Ser Asn Glu Gln Ala Thr Ser Leu Asn Thr Val Gly Gly Thr			
	115	120	125
Gly Gly Ile Gly Gly Val Gly Gly Thr Gly Gly Val Gly Asn Arg Ala			
	130	135	140
Pro Arg Glu Thr Tyr Leu Ser Arg Gly Asp Ser Ser Ser Ser Gln Arg			
145	150	155	160
Thr Asp Tyr Gln Lys Ser Asn Phe Glu Thr Thr Arg Gly Lys Asn Trp			
	165	170	175
Cys Ala Tyr Val His Thr Lys Leu Ser Pro Thr Val Ile Leu Asp Asn			
	180	185	190
Gln Val Thr Tyr Val Pro Gly Gly Lys Gly Pro Cys Gly Trp Thr Gly			
	195	200	205
Gly Ser Cys Pro Gln Arg Ser Gln Lys Ile Ser Asn Pro Val Tyr Arg			
	210	215	220
Met Gln His Lys Ile Val Thr Ser Leu Asp Trp Arg Cys Cys Pro Gly			
225	230	235	240
Tyr Ser Gly Pro Lys Cys Gln Leu Arg Ala Gln Glu Gln Gln Ser Leu			
	245	250	255
Ile His Thr Asn Gln Ala Glu Ser His Thr Ala Val Gly Arg Gly Val			
	260	265	270
Ala Glu Gln Gln Gln Gln Gly Cys Gly Asp Pro Glu Val Met Gln			
	275	280	285
Lys Met Thr Asp Gln Val Asn Tyr Gln Ala Met Lys Leu Thr Leu Leu			
	290	295	300
Gln Lys Lys Ile Asp Asn Ile Ser Leu Thr Val Asn Asp Val Arg Asn			
305	310	315	320
Thr Tyr Ser Ser Leu Glu Gly Lys Val Ser Glu Asp Lys Ser Arg Glu			
	325	330	335
Phe Gln Ser Leu Leu Lys Glu Glu Tyr Ser Ser Cys Ser Arg His Pro			
	340	345	350
Cys Gln Asn Gly Gly Thr Cys Ile Asn Gly Arg Thr Ser Phe Thr Cys			



355                      360                      365  
 Ala Cys Arg His Pro Phe Thr Gly Asp Asn Cys Thr Ile Lys Leu Val  
 370                      375                      380  
 Glu Glu Asn Ala Leu Ala Pro Asp Phe Ser Lys Gly Ser Tyr Arg Tyr  
 385                      390                      395                      400  
 Ala Pro Met Val Ala Phe Phe Ala Ser His Thr Tyr Gly Met Thr Ile  
 405                      410                      415  
 Pro Gly Pro Ile Leu Phe Asn Asn Leu Asp Val Asn Tyr Gly Ala Ser  
 420                      425                      430  
 Tyr Thr Pro Arg Thr Gly Lys Phe Arg Ile Pro Tyr Leu Gly Val Tyr  
 435                      440                      445  
 Val Phe Lys Tyr Thr Ile Glu Ser Phe Ser Ala His Ile Ser Gly Phe  
 450                      455                      460  
 Leu Val Val Asp Gly Ile Asp Lys Leu Ala Phe Glu Ser Glu Asn Ile  
 465                      470                      475                      480  
 Asn Ser Glu Ile His Cys Asp Arg Val Leu Thr Gly Asp Ala Leu Leu  
 485                      490                      495  
 Glu Leu Asn Tyr Gly Gln Glu Val Trp Leu Arg Leu Ala Lys Gly Thr  
 500                      505                      510  
 Ile Pro Ala Lys Phe Pro Pro Val Thr Thr Phe Ser Gly Tyr Leu Leu  
 515                      520                      525  
 Tyr Arg Thr  
 530

<210> 3419

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3419

Met Gln Gln Gly Ser Ala Ser Thr Thr Pro Asp Gln Glu Leu Gln Asn  
 1                      5                      10                      15  
 Cys Lys Ile Leu Asp Thr Ile Gly Arg Gly Thr Phe Ser Glu Val Gln  
 20                      25                      30  
 Asp His Met Leu Ile Gly Thr Gln Met Ala Ile Lys Ile Ile Pro Lys

35                      40                      45  
 Ala Gly Ser Leu Gly Ile Thr Leu Gln Arg Val Ile Ser Ile Leu Lys  
 50                      55                      60  
 Leu Leu Cys His Phe Asn Ile Val Arg Leu Tyr Gln Val Ile Asp Thr  
 65                      70                      75                      80  
 Pro Asn Thr Ser Tyr Leu Phe Ser Asn Gly Val Cys Lys Arg Arg Thr  
 85                      90                      95  
 Pro Thr Gln Pro Ile His His His Gly Leu Met Arg Glu Glu Lys Ala  
 100                      105                      110

<210> 3420

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3420

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly  
 1                      5                      10                      15  
 Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser  
 20                      25                      30  
 Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro  
 35                      40                      45  
 Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu  
 50                      55                      60  
 Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn  
 65                      70                      75                      80  
 Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln  
 85                      90                      95  
 Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr  
 100                      105                      110  
 Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe  
 115                      120                      125  
 Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly  
 130                      135                      140  
 Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr

145                      150                      155                      160  
Pro Thr Ser Cys Ser Arg Cys  
                                165

<210> 3421  
<211> 323  
<212> PRT  
<213> Homo sapiens

<400> 3421																
Met	Ile	Gly	Cys	Leu	His	Ala	Arg	Val	Ser	Gly	Pro	Leu	Trp	Asp	Ala	
1				5				10					15			
Gly	Leu	Cys	Pro	Ala	Ser	Ser	Arg	Ser	Ala	His	Thr	Cys	Leu	Ser	Leu	
			20					25					30			
Ser	Val	Ser	Asp	Ala	Pro	Val	Ser	Pro	Ala	Thr	Ala	Pro	His	Cys	Leu	
		35					40					45				
Leu	Leu	Ser	Thr	Ala	Pro	Ala	Pro	Pro	Cys	Pro	Cys	His	Gly	Val	Leu	
	50					55					60					
Asn	Ser	His	Pro	Phe	Ser	Pro	Pro	Phe	Pro	Gln	Arg	Pro	Asp	Gln	Glu	
65					70					75					80	
Leu	Thr	Gly	Ser	Trp	Gly	His	Gly	Pro	Arg	Ser	Thr	Leu	Val	Arg	Ala	
				85					90					95		
Lys	Ala	Met	Ala	Pro	Pro	Pro	Pro	Pro	Leu	Ala	Ala	Ser	Thr	Pro	Leu	
			100					105					110			
Leu	His	Gly	Glu	Phe	Gly	Ser	Tyr	Pro	Ala	Arg	Gly	Pro	Arg	Phe	Ala	
	115						120					125				
Leu	Thr	Leu	Thr	Ser	Gln	Ala	Leu	His	Ile	Gln	Arg	Leu	Arg	Pro	Lys	
	130					135					140					
Pro	Glu	Ala	Arg	Pro	Arg	Gly	Gly	Leu	Val	Pro	Leu	Ala	Glu	Val	Ser	
145					150					155					160	
Gly	Cys	Cys	Thr	Leu	Arg	Ser	Arg	Ser	Pro	Ser	Asp	Ser	Ala	Ala	Tyr	
				165					170					175		
Phe	Cys	Ile	Tyr	Thr	Tyr	Pro	Arg	Gly	Arg	Arg	Gly	Ala	Arg	Arg	Arg	
		180						185					190			

Ala Thr Arg Thr Phe Arg Ala Asp Gly Ala Ala Thr Tyr Glu Glu Asn  
 195 200 205  
 Arg Ala Glu Ala Gln Arg Trp Ala Thr Ala Leu Thr Cys Leu Leu Arg  
 210 215 220  
 Gly Leu Pro Leu Pro Gly Asp Gly Gly Glu Val Leu Gly Ser Cys Ser  
 225 230 235 240  
 Ile Leu Glu Pro Pro Trp Cys Leu Cys Arg Ile Ser Ser Ile Gly Ser  
 245 250 255  
 Cys Val Phe Ile Phe Leu Cys Val Trp Val Met Tyr Leu Ser Gly Ser  
 260 265 270  
 Val Arg Ser Asp Thr Gln Gly Trp Ala Thr Glu Gly Thr Lys Arg Gln  
 275 280 285  
 Glu Asp Arg Met Trp Trp Leu Met Ser Val Ile Leu Ala Ile Trp Glu  
 290 295 300  
 Ala Glu Ala Gly Gly Ser Pro Glu Ile Arg Ser Ser Arg Pro Ala Trp  
 305 310 315 320  
 Leu Thr Trp

<210> 3422

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3422

Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu Cys Leu Ala Ser Leu  
 1 5 10 15  
 His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly Ser Ser Ser Ser Val  
 20 25 30  
 Ser Arg Ala Ala Val Leu Leu Leu Leu Val Phe Pro His Phe Pro Pro  
 35 40 45  
 Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu Tyr Lys Gln Asn Val  
 50 55 60  
 Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala Glu Ala Val Leu Leu  
 65 70 75 80

Glu Asp Arg Arg Arg His His Arg Val Phe Pro Leu Pro Leu Pro Leu  
                             85                            90                            95  
 Leu Arg Asn Val Ser Ile Pro Ile Gly  
                             100                            105

<210> 3423

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3423

Met Val Lys Gly Gly Ser Ser Ile Ile Ser Pro Asp Thr Asn Leu Leu  
     1                            5                            10                            15  
 Asn Ile Lys Gly Ser His Ser Lys Ser Lys Asn Ser His Phe Phe Phe  
                             20                            25                            30  
 Ser Asn Thr Val Lys Ile Thr Ala Phe Ser Lys Lys Asn Glu Asn Ile  
                             35                            40                            45  
 Phe Asn Cys Asp Leu Ile Asp Ser Val Asp Gln Ile Lys Asn Met Pro  
                             50                            55                            60  
 Cys Leu Asp Leu Arg Glu Phe Gly Lys Asp Val Lys Pro Trp His Val  
     65                            70                            75                            80  
 Glu Thr Thr Glu Ala Ala Arg Asn Asn Glu Asn Thr Gly Phe Asp Ala  
                             85                            90                            95  
 Leu Ser His Glu Cys Thr Ala Lys Pro Leu Phe Pro Arg Val Glu Val  
                             100                            105                            110  
 Gln Ser Glu Gln Leu Thr Val Glu Glu His Ile Lys Arg Asn Arg Cys  
                             115                            120                            125  
 Tyr Ser Asp Thr Glu  
     130

<210> 3424

<211> 139

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3424

Met Ser Ile Arg Ser Asp Lys Ile Lys Asp Ile Asn Leu Met Phe Pro  
 1 5 10 15  
 Trp Pro Ala Leu Arg Cys Ala Gly Thr Asn Arg Leu Tyr Leu Leu Tyr  
 20 25 30  
 Phe Phe Phe Pro Phe Phe Leu Lys Arg Ser Leu Ala Gln Ser Pro Arg  
 35 40 45  
 Leu Glu Gly Ser Gly Ala Ile Ser Ala His Cys Arg Leu Arg Leu Pro  
 50 55 60  
 Gly Ser Arg Arg Ser Pro Ala Ser Ala Ser Arg Ile Ala Gly Thr Thr  
 65 70 75 80  
 Gly Ala Arg His Tyr Ala Arg Leu Ile Phe Cys Val Phe Leu Val Glu  
 85 90 95  
 Ala Gly Phe His His Val Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro  
 100 105 110  
 Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys  
 115 120 125  
 Val Arg Pro Leu Tyr Phe Phe Glu Leu Gln Thr  
 130 135

&lt;210&gt; 3425

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3425

Met Pro Trp Gly Lys Asn Ser Ser Pro His Trp Gly His His Leu Gly  
 1 5 10 15  
 Cys Leu Pro Ser Ala Pro Ala Cys Arg Ile Trp Arg Pro His Ser Arg  
 20 25 30  
 Pro Ala Trp Glu Pro Pro Arg Pro Ser Pro Leu Leu Cys Gln Asp Met  
 35 40 45  
 Ala Leu Gln Asn Ala Leu Tyr Thr Gly Asp Leu Ala Arg Leu Gln Glu  
 50 55 60

Leu Phe Pro Pro His Ser Thr Ala Asp Leu Leu Leu Glu Ser Arg Ala  
 65 70 75 80  
 Ala Glu Pro Arg Trp Ser Ser His Gln Arg Gly Leu Trp Ser Leu Thr  
 85 90 95  
 Tyr Glu Glu Glu Leu Thr Thr Pro Leu His Val Ala Ala Ser Arg Gly  
 100 105 110  
 His Thr Glu Val Leu Arg Leu Leu Leu Arg Arg Arg Ala Arg Pro Asp  
 115 120 125  
 Ser Ala Pro Gly Gly Arg Thr Ala Leu His Glu Ala Cys Ala Ala Gly  
 130 135 140  
 His Thr Ala Cys Val His Val Leu Leu Val Ala Gly Ala Asp Pro Asn  
 145 150 155 160  
 Ile Ala Asp Gln Asp Gly Lys Arg Pro Leu His Leu Cys Arg Gly Pro  
 165 170 175  
 Gly Thr Leu Glu Cys Ala Glu Leu Leu Leu Arg Phe Gly Ala Arg Val  
 180 185 190  
 Asp Gly Arg Ser Glu Glu Glu Glu Glu Thr Pro Leu His Val Ala Ala  
 195 200 205  
 Arg Leu Gly His Val Glu Leu Ala Asp Leu Leu Leu Arg Arg Gly Ala  
 210 215 220  
 Cys Pro Asp Ala Arg Asn Ala Glu Gly Trp Thr Pro Leu Leu Ala Ala  
 225 230 235 240  
 Cys Asp Val Arg Cys Gln Ser Ile Thr Asp Ala Glu Ala Thr Thr Ala  
 245 250 255  
 Arg Cys Leu Gln Leu Cys Ser Leu Leu Leu Ser Ala Gly Ala Asp Ala  
 260 265 270  
 Asp Ala Ala Asp Gln Asp Lys Gln Arg Pro Leu His Leu Ala Cys Arg  
 275 280 285  
 Arg Gly His Ala Ala Val Val Glu Leu Leu Leu Ser Cys Gly Val Ser  
 290 295 300  
 Ala Asn Thr Met Asp Tyr Gly Gly His Thr Pro Leu His Cys Ala Leu  
 305 310 315 320  
 Gln Gly Pro Ala Ala Ala Leu Ala Gln Ser Pro Glu His Val Val Arg  
 325 330 335  
 Ala Leu Leu Asn His Gly Ala Val Arg Val Trp Pro Gly Ala Leu Pro  
 340 345 350

Lys Val Leu Glu Arg Trp Ser Thr Cys Pro Arg Thr Ile Glu Val Leu  
 355 360 365  
 Met Asn Thr Tyr Ser Val Val Gln Leu Pro Glu Glu Ala Val Gly Leu  
 370 375 380  
 Val Thr Pro Glu Thr Leu Gln Lys His Gln Arg Phe Tyr Ser Ser Leu  
 385 390 395 400  
 Phe Ala Leu Val Arg Arg Pro Arg Ser Leu Gln His Leu Ser Arg Cys  
 405 410 415  
 Ala Pro Arg Ser His Leu Glu Gly Ser Leu Pro Gln Ala Leu Pro Arg  
 420 425 430  
 Leu Pro Leu Pro Pro Arg Leu Leu Arg Tyr Leu Gln Leu Asp Phe Glu  
 435 440 445  
 Gly Val Leu Tyr  
 450

<210> 3426

<211> 398

<212> PRT

<213> Homo sapiens

<400> 3426

Met Val Thr Leu Ile Thr Glu Lys Leu Gln Ser Gln Ser Leu Asp Asp  
 1 5 10 15  
 Leu Thr Cys Lys Ala Glu Ala Gly Pro Leu Gln Tyr Ser Ala Glu Thr  
 20 25 30  
 Leu Asn Lys Ser Gly Arg Leu Phe Pro Leu Glu Leu Asn Asp Gln Ser  
 35 40 45  
 Pro Trp Lys Val Phe Ser Gly Gly Pro Pro Val Arg Ser Gln Ala Ala  
 50 55 60  
 Thr Gly Pro Asp Phe Ser Phe Leu Pro Gly Leu Ser Ala Ala Ala His  
 65 70 75 80  
 Thr Met Gly Leu Gln Trp Gln Pro Gln Ser Pro Arg Pro Gly Val Gly  
 85 90 95  
 Leu Gly Ala Ala Ser Thr Val Asp Pro Ser Glu Ser Thr Gly Ser Ser



100	105	110
Thr Ala Pro Pro Thr Lys Arg His Cys Arg Ser Leu Ser Glu Pro Glu		
115	120	125
Glu Leu Val Arg Cys Arg Ser Pro Trp Arg Pro Gly Ser Ser Lys Val		
130	135	140
Trp Thr Pro Val Ser Lys Arg Arg Cys Asp Ser Gly Gly Ser Ala Thr		
145	150	155
Arg Gln Gly Ser Pro Gly Ala Val Leu Pro Arg Ser Ala Val Trp Ser		
165	170	175
Thr Gly Pro Thr Ser Pro Ala Thr Pro Arg Pro Ser Ser Ala Ser Gly		
180	185	190
Gly Phe Val Asp Ser Ser Glu Gly Ser Ala Gly Ser Gly Pro Leu Trp		
195	200	205
Cys Ser Ala Glu Ser Cys Leu Pro Ser Thr Arg Arg Arg Pro Ser Leu		
210	215	220
Ser Gln Glu Arg Leu Ala Gly Ala Gly Thr Pro Leu Pro Trp Ala Ser		
225	230	235
Ser Ser Pro Thr Ser Thr Pro Ala Leu Gly Gly Arg Arg Gly Leu Leu		
245	250	255
Arg Cys Arg Ser Gln Pro Cys Val Leu Ser Gly Lys Arg Ser Arg Arg		
260	265	270
Lys Arg Arg Arg Glu Glu Asp Ala Arg Trp Thr Arg Pro Ser Leu Asp		
275	280	285
Phe Leu Lys Met Thr Gln Thr Leu Lys Asn Ser Lys Ser Leu Cys Ser		
290	295	300
Leu Asn Tyr Glu Asp Asp Asp Glu Asp Asp Thr Pro Val Lys Thr Val		
305	310	315
Leu Ser Ser Pro Cys Asp Ser Arg Gly Leu Pro Gly Ile Thr Met Pro		
325	330	335
Gly Cys Ser Gln Arg Gly Leu Arg Thr Ser Pro Val His Pro Asn Leu		
340	345	350
Trp Ala Ser Arg Glu Ser Val Thr Ser Asp Gly Ser Arg Arg Ser Ser		
355	360	365
Gly Asp Pro Arg Asp Gly Asp Ser Val Gly Glu Glu Gly Val Phe Pro		
370	375	380
Arg Ala Arg Trp Glu Leu Asp Leu Glu Gln Ile Glu Asn Asn		

385

390

395

&lt;210&gt; 3427

&lt;211&gt; 119

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3427

Met Pro Ala Pro Met Val Val Ser Gly Lys Ala His Ser Ser Ser Val  
 1 5 10 15  
 Thr Phe Pro Phe Ser Ile His Leu Arg Leu His Ala Leu Gln Leu Leu  
 20 25 30  
 Gly Leu Cys Ser Cys His Ile Glu Glu Gly Gly Trp Ala Arg His Gly  
 35 40 45  
 Ile Ile Leu Arg Ser Leu Leu His Gln Leu Leu Gly Thr Met Glu Tyr  
 50 55 60  
 Pro Arg Val Val Thr Ala Asp Gly Ala Thr Trp Gly Arg Ala Gln Val  
 65 70 75 80  
 Gly Gln Ala Thr Ala Gly Val Met Ala Cys Glu Pro Gln Ala Thr Ser  
 85 90 95  
 Gly Thr Phe Pro Thr Ala Ser Met Gln Gly Cys Arg Ala Met Val Pro  
 100 105 110  
 Phe Ser Thr Ala Leu Glu Leu  
 115

&lt;210&gt; 3428

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3428

Met Asp Gln Ser Arg Gly Arg Gly Thr Ala Leu Glu Pro Ile Gly Gly  
 1 5 10 15  
 Leu Arg Met Ala Ser Leu Ser Gly Lys Asp Phe His Pro Asp Ser Phe

20 25 30  
 Arg Pro Gln Pro Gln Pro Ser Arg Arg Trp Ala Gly Leu Glu Glu Arg  
 35 40 45  
 Ser Ser Glu Arg Thr Ile Asn Leu Ser Val Leu His Phe Tyr Pro Ser  
 50 55 60  
 Pro Gln Glu Ser Pro Ser Leu Pro Ser Ala Val Arg Pro Phe Pro Gly  
 65 70 75 80  
 Ala Arg Gly Val Arg Ser Arg Ala Leu Met Gly Val Asn Cys Ser Leu  
 85 90 95  
 Asp Ser Val Lys Leu Ala Cys Trp Leu Gly Val Phe Pro Ile Trp Gly  
 100 105 110  
 Glu Ser Pro Leu Thr Asn Ser Pro Lys Ala Ile His Arg Ala Phe Tyr  
 115 120 125  
 Ser Pro Thr Ser Thr Gln Leu Leu Tyr Arg Gln Arg Gln Arg Gln Thr  
 130 135 140  
 His Thr His Ser  
 145

<210> 3429

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3429

Met Arg Pro Leu Gly Lys Gly Leu Leu Pro Ala Glu Glu Leu Ile Arg  
 1 5 10 15  
 Ser Asn Leu Gly Val Gly Arg Ser Leu Arg Asp Cys Leu Ser Gln Ser  
 20 25 30  
 Gly Lys Leu Ala Glu Glu Leu Gly Ser Lys Arg Leu Lys Pro Ala Lys  
 35 40 45  
 Phe Gly Thr Glu Gly Lys Glu Arg Val Glu Gln Arg Thr Glu Arg Gln  
 50 55 60  
 Arg Thr Gly Ser Ser Lys Glu Pro Arg Met Gln Ile Ile Cys Arg Arg  
 65 70 75 80  
 Arg Trp Arg Glu Pro Pro Pro Arg Leu Leu Trp Gly Cys Leu Met Pro

	85		90		95										
Arg	Ala	Gln	Pro	Leu	Leu	His	Val	Thr	Ala	Tyr	Glu	Asn	Thr	Gly	His
	100							105						110	
Trp	Glu	Arg	Leu	Ala	Ser	Val	Val	Ser	Ser	Lys	Thr	Gln	Gln	Pro	Thr
	115							120						125	
Val	Ile	Ser	His	Ser	Ser	Ile	Ser	Ile	Thr	Phe	Ser	His	Tyr	Pro	Pro
	130							135						140	
Ala	Thr	Leu	Asp	Ser	Phe	Leu	Val	Leu	Glu	Pro	Ile	Lys	Leu	Phe	Pro
145						150					155				160
Val	Ser	Ser	Leu	Arg	Ser	Pro	Leu	Cys	Leu	Asn	Cys	Gly	Ser	Cys	Arg
				165						170					175
Glu	Ser	Ile	Arg	Ile	Ser	Gly	Glu	Leu	Ile	Gly	Asn	Ala	His	Ser	Pro
			180							185					190
Ala	Pro	Pro	Arg	Thr	Pro	Glu	Leu	Glu	Thr	Leu	Gly	Trp	Asp	Lys	Gln
			195							200					205
Ala	Val	Leu	Ser	Gly	Ala	Gln	Val	Ile	Leu	Val	Cys	Ala	Glu	Val	
	210							215						220	

&lt;210&gt; 3430

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3430

Met	Val	Thr	Leu	Met	Gly	Val	Trp	Leu	Gly	Pro	Trp	Gly	Arg	Gly	Met
1				5					10					15	
Ala	Ala	Pro	Pro	Thr	Glu	Gly	Ala	Ala	Val	Thr	Pro	Ala	Ser	Ser	Pro
				20					25					30	
Gly	Pro	Gln	Ala	Ser	Leu	Ala	Trp	Arg	Ser	Ser	Gly	Ser	Arg	Pro	Cys
			35					40						45	
Cys	Pro	Leu	Thr	Ala	Ser	Leu	Thr	Ser	Pro	Trp	Arg	Asn	Gln	Pro	Leu
	50						55							60	
His	Thr	Ala	Pro	Ser	Gly	Gly	Gly	Cys	Cys	Val	Thr	Gly	Pro	Ala	Cys
	65						70							75	80
Ser	Ile	Ala	Trp	Ala	Gly	Arg	Ser	Pro	Pro	Ser	Arg	Trp	Ile	Phe	Gln

85 90 95  
 Arg Gly Leu Thr Ala Thr Ser Thr Leu Pro Gly Ser Cys Trp Lys Gly  
 100 105 110  
 Arg Ser Ser Ala Ser Trp Pro His Thr Gly Ala Val Cys Cys Pro Ala  
 115 120 125  
 Pro Ala Pro Cys  
 130

<210> 3431

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3431

Met Glu Gln Asp Asn Ser Pro Arg Lys Ile Gln Phe Thr Val Pro Leu  
 1 5 10 15  
 Leu Glu Pro His Leu Asp Pro Glu Ala Ala Glu Gln Ile Arg Arg Arg  
 20 25 30  
 Arg Pro Thr Pro Ala Thr Leu Val Leu Thr Ser Asp Gln Ser Ser Pro  
 35 40 45  
 Glu Ile Asp Glu Asp Arg Ile Pro Asn Pro His Leu Lys Lys Leu Gln  
 50 55 60  
 Asn Ala Ser Leu Lys Leu Thr Arg Glu Ala Val Arg Asn Pro Ala Gln  
 65 70 75 80  
 Lys Asn Pro Gln Pro Ile Tyr His His Trp Ile Pro Arg Glu Pro Thr  
 85 90 95  
 Arg Ser Glu Arg Arg Gly Gly Thr Gly Gly Gln Lys Ser Val Gly Gly  
 100 105 110  
 Phe Pro Cys Ser Thr His Thr Leu Ala Pro Phe Tyr Val Phe Thr Arg  
 115 120 125  
 Ser Ile Leu Leu Leu Lys Arg Gly Glu Arg Met Ser His Pro Leu Glu  
 130 135 140  
 Pro Arg Asp Asp Pro Thr Lys Met Pro  
 145 150

&lt;210&gt; 3432

&lt;211&gt; 387

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3432

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Met Ser Ser Pro Pro Ala Leu Arg Asp Ser Pro Val Cys Pro Arg Tyr
  1             5             10             15
Ser Pro Thr Thr Pro Thr Phe Gln Leu Glu Ser Leu Ala Gly Thr Gln
      20             25             30
Glu Leu Pro Thr Asn Ser Ala Val Ala Leu Ser Tyr Ser Pro Val Ser
      35             40             45
Leu Met Ser Ser Pro Pro Ala Pro Trp Asp Ser Pro Val Cys Pro Ser
      50             55             60
Ser Ser Pro Thr Thr Pro Arg Phe Gln Arg Glu Ser Ala Ser His Thr
      65             70             75             80
Pro Glu Ser Pro Thr Asp Ser Gln Thr Ser Arg Arg Ser Ser Leu Val
      85             90             95
Ser Leu Arg Ser Leu Pro Ser Ala His Arg Asp Ser Cys Val Ser Phe
      100            105            110
Ser Tyr Ser Arg Asn Phe Ser Arg Phe Gln Leu Asp Ser Val Pro Gly
      115            120            125
Thr His Asp Thr Pro Pro Asn Ser Arg Ile Ser Leu Thr Tyr Ser Pro
      130            135            140
Val Ser Leu Met Phe Ser Pro Pro Ala Leu Arg Asp Ser Ser Val Ser
      145            150            155            160
Leu Ser Tyr Ser Pro Ala Ile Ser Thr Ser His Leu Gly Ser Ala Ser
      165            170            175
His Thr Gln Glu Ser Pro Thr Asn Ser Arg Thr Leu Leu Gln Pro Ser
      180            185            190
Pro Ile Ser Phe Thr Ser Ser Pro Pro Ala Phe Arg Asp Ser Pro Val
      195            200            205
Ser Pro Ser Phe Ser Pro Ala Phe Pro Arg Phe Leu Pro Gln Ser Ala
      210            215            220
Pro Gly Thr Gln Gly Tyr Pro Gly His Ser Gln Ala Ser Arg Asp Tyr

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225                      230                      235                      240  
 Phe Pro Met Thr Cys Ile Tyr Arg Gly Met Ala Pro Ile Leu Pro Ser  
                          245                      250                      255  
 Val Thr Ser Asn Pro Ser Pro Leu Thr Leu Arg His Ser Gln Gly Leu  
                          260                      265                      270  
 Thr Ala Thr Pro Arg Tyr Cys Pro Ser Ala Arg Ser Pro Gly Pro Ser  
                          275                      280                      285  
 Thr Ser Gln His Asp Ala Ala Thr Trp Pro Cys Leu His Ile Ser Gly  
                          290                      295                      300  
 Glu Gly Pro Thr Pro Ser Arg Arg Arg Ala Pro Pro Ala Phe Arg Pro  
 305                      310                      315                      320  
 His Thr Gln Ala Cys Pro Ser Thr Cys Tyr Cys His Pro Leu Ala Ser  
                          325                      330                      335  
 Arg Arg Gly Pro Cys Asn Gly Arg Tyr His Arg Pro Val Tyr Pro His  
                          340                      345                      350  
 Pro Thr Ala Val Gln Arg Asp Pro Pro Ala Gly Pro Arg Gly Cys His  
                          355                      360                      365  
 Ser Pro Cys Trp His Asp Ala Pro Ala Cys Arg Arg Pro Cys Gly Pro  
                          370                      375                      380  
 Arg Tyr Arg  
 385

<210> 3433

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3433

Met Pro Gly Glu Pro Pro Leu Gly Lys Met Phe Gly Arg Gly Ser Lys  
   1                      5                      10                      15  
 Gly Ser Thr Glu Asp Gly Leu Glu Leu Arg Gly Ile His Phe Met Val  
                          20                      25                      30  
 Lys Lys Pro Phe Leu Lys Glu Ser Ser Thr Gln Glu Thr Pro Pro Thr  
                          35                      40                      45  
 His Ala Ser Leu Pro Pro Lys Thr Arg Leu Cys Leu Ser His Thr Phe

50                      55                      60  
 Tyr Val Leu Tyr Ile Lys Asn Pro Leu Glu Phe Ser Lys Leu Gly Ile  
 65                      70                      75                      80  
 Val Val Cys Asp Ala Tyr Leu Lys Arg Gly Glu Arg Val Gly His Gly  
                          85                      90                      95  
 Gly Ser Arg Leu  
                          100

<210> 3434

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3434

Met Gln Ala Leu Ser Lys Leu Gly Ser Leu Ser Gln Leu Asp Trp Gly  
 1                      5                      10                      15  
 Pro Arg Pro Gly Ser Gly Ala Ala Gly Ala Trp Ala Trp Gly Leu Ala  
                          20                      25                      30  
 Val Ala His Gly Leu Ser Ser Gly Leu Gly Trp Arg Arg Cys Ser Leu  
                          35                      40                      45  
 Ala Ala Cys Ala Val Leu Glu Leu Thr Trp Gly Lys Ala Gly Leu Ala  
                          50                      55                      60  
 Gly Leu Gly Arg Ala Arg Leu Trp Pro Arg Pro Leu Gly Arg Leu Arg  
 65                      70                      75                      80  
 Arg Glu Gln Arg Leu Ser Pro Gly Ala Leu Arg Cys Ile Cys Ala Arg  
                          85                      90                      95  
 Ser Val Ala Arg Cys Leu  
                          100

<210> 3435

<211> 125

<212> PRT

<213> Homo sapiens



&lt;400&gt; 3435

Met Ser Ser Gln Cys Leu Glu Thr Arg Thr Val Ile Tyr Arg Ser Ile  
 1 5 10 15  
 Phe Leu Val Phe Leu Lys Val Ser Phe His Asn Thr Arg Ser Ser Leu  
 20 25 30  
 Pro Leu Val Ser Trp Arg Val His Pro Thr Asp Glu Ser Ser Phe Pro  
 35 40 45  
 Val Gly Leu Ser His Leu Gly Asn Ser Leu Arg Ser Thr Tyr Gln Pro  
 50 55 60  
 Arg Lys Lys Leu Pro Gly Tyr Leu Leu Pro Thr Cys Pro Gly Leu Ile  
 65 70 75 80  
 Asn Thr Lys Gly Gly Lys Leu Lys Gly Ala Ala Asn Trp Ser Thr Trp  
 85 90 95  
 Lys Gly Gly Ser Thr Leu Asp Trp Cys Leu Ser Phe Ser Ser Phe Phe  
 100 105 110  
 Leu Lys Lys Ile Tyr Phe Leu Asn Asn Asn Lys Cys Thr  
 115 120 125

&lt;210&gt; 3436

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3436

Met Asp Gly Gln Thr Glu Arg Ala Ala Asn Gln Gln Ala Ser Ser Ser  
 1 5 10 15  
 Gln Ala Ser His Leu Trp Pro Cys Ile Phe Leu Ser Val Gly Gln Arg  
 20 25 30  
 Tyr Lys Glu Ile Arg Gln Lys Tyr Arg Arg Trp Ser Phe Ala Leu Ser  
 35 40 45  
 Pro Arg Leu Glu Gly Asn Asp Thr Thr Ile Ala His Trp Ser Leu Glu  
 50 55 60  
 Leu Leu Gly Ser His Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly  
 65 70 75 80  
 Thr Thr Ala Thr His His Cys Gly Gly Leu Thr Gly Gly Val Arg Thr

85 90 95  
 Glu Val Asn Ser Leu  
 100

<210> 3437

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3437

Met Thr Pro Pro Pro Lys Thr His Thr His Thr Val Val Ser Tyr His  
 1 5 10 15  
 Ser Arg Trp Ala Met Cys Lys Asp Ser Arg Asp Gln Glu Cys Arg Trp  
 20 25 30  
 Pro Gln Gln Gly Trp Leu Ser Phe Pro Cys Ser Phe Thr Ser Gly Thr  
 35 40 45  
 Ser Ala Gly Lys Gly Leu Ser Ser Trp Asn His Ala Pro Val Ile Gly  
 50 55 60  
 Ala Ala Ile Thr Trp Gln Leu Gly Leu Ser Ala Gly Met His Thr Gly  
 65 70 75 80  
 Ala Leu Leu Cys Gly Val Ala Ser Ser Ala Cys Leu Asp Phe Phe Tyr  
 85 90 95  
 Gly Gly Pro Glu Ile  
 100

<210> 3438

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3438

Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr  
 1 5 10 15

Ile Ala Ala Ala Leu Ser Val Gln Ser Pro Phe Thr Arg Ser Ala Gln  
                   20                                  25                                  30  
 Ser Ser Pro Glu Cys Ala Ala Ala Arg Arg Pro Leu Glu Ser Asp Gln  
                   35                                  40                                  45  
 Gly Asp Pro Phe Thr Leu Phe Asn Val Phe Asn Ala Trp Val Gln Val  
                   50                                  55                                  60  
 Lys Ser Glu Arg Ser Arg Asn Ser Arg Lys Trp Cys Arg Arg Arg Gly  
                   65                                  70                                  75                                  80  
 Ile Glu Glu His Arg Leu Tyr Glu Met Ala Asn Leu Arg Arg Gln Phe  
                                   85                                  90                                  95  
 Lys Glu Leu Leu Glu Asp His Gly Leu Leu Ala Gly Ala Gln Ala Ala  
                   100                                  105                                  110  
 Gln Val Gly Asp Ser Tyr Ser Arg Leu Gln Gln Arg Arg Glu Arg Arg  
                   115                                  120                                  125  
 Ala Leu His Gln Leu Arg Arg Gln His Glu Glu Gly Ala Gly Arg Arg  
                   130                                  135                                  140  
 Arg Lys Val Leu Arg Leu Gln Glu Glu Gln Asp Gly Gly Ser Ser Asp  
                   145                                  150                                  155                                  160  
 Glu Asp Arg Ala Gly Pro Ala Pro Pro Gly Ala Ser Asp Gly Val Asp  
                   165                                  170                                  175  
 Ile Gln Asp Val Lys Phe Lys Leu Arg His Asp Leu Ala Gln Leu Gln  
                   180                                  185                                  190  
 Ala Ala Ala Ser Ser Ala Gln Asp Leu Ser Arg Glu Gln Leu Ala Leu  
                   195                                  200                                  205  
 Leu Lys Leu Val Leu Gly Arg Gly Leu Tyr Pro Gln Leu Ala Val Pro  
                   210                                  215                                  220  
 Asp Ala Phe Asn Ser Ser Arg Lys Asp Ser Asp Gln Val Gly Pro Val  
                   225                                  230                                  235                                  240  
 Leu Pro His Pro Met Phe Cys Pro Pro Thr His Glu Pro  
                                   245                                  250

<210> 3439

<211> 180

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3439

Met Ala Gln Pro Pro Val Thr Leu Leu Cys Ile Cys Ser Glu Val Leu  
 1 5 10 15  
 Val Arg Ala Ala Asp Ser Ile Trp Lys Trp Thr Leu Ser Gly Pro Gly  
 20 25 30  
 Pro Gly Ser Val Trp Pro Ser Thr Gly Glu Ala Gly Leu Arg Arg Gly  
 35 40 45  
 Leu Arg Ala Glu Ala Pro Leu Gln Gln Leu Gln Glu Gly Pro Ala Pro  
 50 55 60  
 Gly Glu Glu Cys Leu Gly Arg Ala Trp Gly Leu Arg Val Arg Arg Arg  
 65 70 75 80  
 Gly Pro Leu Pro Pro Leu Pro Trp Gly Ser Glu Arg Pro Pro Cys Cys  
 85 90 95  
 Leu Glu Gly Ala Trp Gln Leu Glu Trp Glu Gln Arg Pro Gln Gly Gly  
 100 105 110  
 Arg Ala Gly Gly Arg Gly Pro Ala Ala Cys Pro Val Pro Arg Lys Val  
 115 120 125  
 Thr Ala Cys Phe Glu Ser Ala Ala Lys Lys Ser Val Gly Gln Phe Arg  
 130 135 140  
 Gln Leu Ser Pro Glu Leu Pro Arg Glu Thr His Pro Ala Cys Pro Ala  
 145 150 155 160  
 Leu Pro Thr Gly Ser Arg Arg Thr Glu Gly Thr Gln Leu Gly Ala Arg  
 165 170 175  
 Arg Pro Gly Leu  
 180

&lt;210&gt; 3440

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3440

Met Pro Ser Phe Thr His Ser Pro Pro Glu His Ser Val Ser Pro Met  
 1 5 10 15

Val Arg Ala Arg Leu Leu Arg Met Ala Phe Lys Ala Ser Val Pro Ser  
                   20                                  25                                  30  
 Pro Arg Pro Ala Ile Leu Gln Arg Val Arg Ser Ala Ser Pro Gly Pro  
                   35                                  40                                  45  
 Leu Pro Val Leu Leu Cys Glu Ala Pro Cys Pro His Leu Phe Thr Cys  
                   50                                  55                                  60  
 Gln Pro Leu His Phe Leu Arg Val Leu Thr Leu Val Ser Trp Leu Pro  
                   65                                  70                                  75                                  80  
 Phe Tyr Phe Lys Glu Pro Pro Val Tyr Leu Pro Pro Ser Val Ser Leu  
                                   85                                  90                                  95  
 Ile Leu Leu Ala Leu Ser Phe Phe Cys Ile Ile Tyr Tyr Leu Ile Thr  
                                   100                                  105                                  110  
 Tyr Lys Lys Met Tyr Thr Leu Met Cys Thr Val Ser Asn Cys  
                   115                                  120                                  125

<210> 3441

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3441

Met Pro Val Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu  
           1                                  5                                  10                                  15  
 Glu Leu Arg Ser Ser Gly Pro Ala Leu Asp Lys Met Val Arg Pro Cys  
                   20                                  25                                  30  
 Leu Cys Gln Lys Asn Thr Glu Val Ser Gln Ala Trp Cys Ser Val Pro  
                   35                                  40                                  45  
 Val Val Ala Ala Thr Gly Glu Ala Glu Val Gly Gly Ser Leu Asp Pro  
                   50                                  55                                  60  
 Arg Arg Ser Gly Leu Gln Trp Ala Val Ile Val Pro Leu His Pro Ser  
                   65                                  70                                  75                                  80  
 Leu Gly Asp Arg Val Arg Pro Cys Leu Lys Lys Arg Lys Val Lys Ala  
                                   85                                  90                                  95  
 Thr Arg Gly Gly Ser Cys Leu Trp Phe Gln His Phe Gly Arg Pro Arg  
                   100                                  105                                  110

Arg Val Asp His Leu Arg Trp Gly Val  
 115 120

<210> 3442

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3442

Met Arg Pro Lys Pro Pro Ser Arg Ala Gly Val Leu Gln Ile Ala Gln  
 1 5 10 15  
 Glu Leu His Arg Lys Ala Glu Gln Thr Pro Pro Arg Pro Arg Pro Arg  
 20 25 30  
 Ser Leu Thr Val Ala Arg Gly Ser Val Gly His Thr Glu Glu Arg Gly  
 35 40 45  
 Gly Val Ala Ala Glu Leu Arg Lys Arg Leu Val Arg Gly Gly Ala Arg  
 50 55 60  
 Arg Gly Ser Arg Asp Gly Gly Arg Gly Arg Arg Gly Gly Gly Val Ala  
 65 70 75 80  
 Gly Gln Arg Ser Gln Glu Gly Trp Gly Ser Gly Arg Arg Ala Arg Val  
 85 90 95  
 Thr Gly Arg Gly Ser Trp Gly Arg Gly Pro Gly Val Ala Ala Arg Gly  
 100 105 110  
 Val Gly Ala Ala Gly Arg Asp Thr Gly Gly Pro Arg Ala Leu Gly Gly  
 115 120 125  
 Gly Cys Lys Ala Trp Ile Thr Leu Met Ser Gly Glu Thr Cys Thr Gly  
 130 135 140  
 Gly Thr Ile Leu Ser Pro Thr Ser Ala Pro Glu Ala Gln Pro Ala Asp  
 145 150 155 160  
 Gly Ala Gly Cys Arg Thr Ser Gln Gln Ser Leu Gly Gly Lys Gly Gly  
 165 170 175  
 Ala Gly Arg Thr His Ala Pro Ser Ala Ala Arg Glu Arg Gly Ala Ala  
 180 185 190  
 Pro Pro Gly Asp Arg Arg Val Thr Ala Arg Pro Arg Ala Ala Val Thr  
 195 200 205

Ser Arg Glu Ala His Ala His Lys Gly Trp Gly Val Arg Gly Gly Ser  
 210 215 220  
 Ser Ala Ala Pro Ala Gln Leu Leu Arg Glu Ala Gly Ser Ala Pro Ser  
 225 230 235 240  
 Gly Arg Gly Val Ser Phe Pro Arg Arg Ala Gly Gly Pro Leu Phe Pro  
 245 250 255  
 Arg Ala Ala Ala Glu Ala Pro Pro Ser Ala Ser Trp Pro Cys Val His  
 260 265 270  
 Thr Pro Asp Cys Gly Pro Gly Arg Thr Leu Ser Ser Cys Ala Glu Arg  
 275 280 285  
 Arg Arg Pro Glu Val Arg Ala Ala Arg Ala Gly Pro Ala Pro Arg Thr  
 290 295 300  
 Ala Pro Thr Arg Gly Trp Pro Gly Gln Gly Pro Gly Gly Pro Gly Ser  
 305 310 315 320  
 Gly Val

<210> 3443

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3443

Met Lys Ala Glu Ala Thr Val Ile Pro Ser Arg Cys Ala Arg Gly Leu  
 1 5 10 15  
 Pro Ser Trp Gln Val Leu Ser Pro Val Gln Pro Trp Gln Thr Ser Ala  
 20 25 30  
 Pro Gln Asn Thr Thr Gln Pro Lys Leu Leu Ala Pro His Gln His Asp  
 35 40 45  
 Lys Ser Gln Lys Lys Ser Ser Leu Leu Lys Glu Leu Gly Ala Phe His  
 50 55 60  
 Ile Thr Ile Ala Leu Leu His Leu Val Phe Gly Gly Tyr Leu Ala Ser  
 65 70 75 80  
 Ile Val Lys Asn Leu His Leu Val Val Leu Lys Ser Trp Tyr Pro Phe  
 85 90 95

Trp Gly Ala Ala Ser Phe Leu Ile Ser Gly Ile Leu Ala Ile Thr Met  
                   100                  105                  110  
 Lys Thr Phe Ser Lys Thr Tyr Leu Lys Met Leu Cys Leu Met Thr Asn  
                   115                  120                  125  
 Leu Ile Ser Leu Phe Cys Val Leu Ser Gly Leu Phe Val Ile Ser Lys  
                   130                  135                  140  
 Asp Leu Phe Leu Glu Ser Pro Phe Glu Ser Pro Ile Trp Arg Met Tyr  
                   145                  150                  155                  160  
 Pro Asn Ser Thr Val His Ile Gln Arg Leu Glu Leu Ala Leu Leu Cys  
                   165                  170                  175  
 Phe Thr Val Leu Glu Leu Phe Leu Pro Val Pro Thr Ala Val Thr Ala  
                   180                  185                  190  
 Trp Arg Gly Asp Cys Pro Ser Ala Lys Asn Asp Asp Ala Cys Leu Val  
                   195                  200                  205  
 Pro Asn Thr Pro Leu His Leu Lys Gly Leu Pro Val Glu Pro Pro Pro  
                   210                  215                  220  
 Ser Tyr Gln Ser Val Ile Gln Gly Asp Ala Gln His Lys Gln His Gln  
                   225                  230                  235                  240  
 Arg Leu Arg Glu Val Lys Gln Val Ala Pro Asp Thr Trp Ile Val Thr  
                   245                  250                  255  
 Asp Gly Ala Ala Ile Trp Ala Gln Thr Ala Asn  
                   260                  265

<210> 3444

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3444

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Ile Ile Lys Gly  
                   1                  5                  10                  15  
 Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Thr  
                   20                  25                  30  
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe



35	40	45
Gly Asp Phe Tyr Met Thr Trp Leu Arg Gln Val Pro Gly Lys Asp Leu		
50	55	60
Glu Trp Leu Ala Tyr Ile Ser Ser Asn Gly Gly Tyr Ser Glu Tyr Ala		
65	70	75
80		
Asp Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Asn		
85	90	95
Ser Leu His Leu Gln Met Asn Ser Leu Arg Ala Gln Asp Thr Ala Ile		
100	105	110
Tyr Tyr Cys Ala Arg Phe Thr Val Ser Met Asp Thr Val Ala Tyr Ser		
115	120	125
Tyr Gly Leu Asp Val Trp Gly Pro Gly Thr Ala Val Thr Val Ser Ser		
130	135	140
Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr		
145	150	155
160		
Gln Pro Asp Gly Asn Val Val Ile Ala Cys Leu Val Gln Gly Phe Phe		
165	170	175
Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val		
180	185	190
Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly Asp Leu Tyr		
195	200	205
Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys Leu Ala Gly		
210	215	220
Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro Ser Gln Asp		
225	230	235
240		
Val Thr Val Pro Cys Pro Val Pro Ser Thr Pro Pro Thr Pro Ser Pro		
245	250	255
Ser Thr Pro Pro Thr Pro Ser Pro Ser Cys Cys His Pro Arg Leu Ser		
260	265	270
Leu His Arg Pro Ala Leu Glu Asp Leu Leu Leu Gly Ser Glu Ala Asn		
275	280	285
Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp Ala Ser Gly Val Thr Phe		
290	295	300
Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala Val Gln Gly Pro Pro Glu		
305	310	315
320		
Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser Ser Val Leu Pro Gly Cys		

325 330 335  
 Ala Glu Pro Trp Asn His Gly Lys Thr Phe Thr Cys Thr Ala Ala Tyr  
 340 345 350  
 Pro Glu Ser Lys Thr Pro Leu Thr Ala Thr Leu Ser Lys Ser Gly Asn  
 355 360 365  
 Thr Phe Arg Pro Glu Val His Leu Leu Pro Pro Pro Ser Glu Glu Leu  
 370 375 380  
 Ala Leu Asn Glu Leu Val Thr Leu Thr Cys Leu Ala Arg Gly Phe Ser  
 385 390 395 400  
 Pro Lys Asp Val Leu Val Arg Trp Leu Gln Gly Ser Gln Glu Leu Pro  
 405 410 415  
 Arg Glu Lys Tyr Leu Thr Trp Ala Ser Trp Gln Glu Pro Ser Gln Gly  
 420 425 430  
 Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp  
 435 440 445  
 Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu  
 450 455 460  
 Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro  
 465 470 475 480  
 Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys  
 485 490 495  
 Tyr

<210> 3445

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3445

Met Ala Gly Leu Ala Arg Arg Val Val Gly Ala Phe Leu Leu Phe His  
 1 5 10 15  
 Phe Lys Gln Lys Ser Gly Ala Glu Thr Gly Glu Ala Ala Leu His Leu  
 20 25 30

Gly	Arg	Ser	Pro	Val	Leu	Pro	Ala	Arg	Ala	Gly	Ile	Leu	Arg	Thr	Cys	
35					40					45						
Leu	Ser	Leu	Arg	Ala	Val	Thr	Ser	Pro	Gln	Asp	Phe	Gly	Ser	Ala	Gln	
50					55					60						
Arg	Thr	Arg	Ser	Ala	Pro	Leu	Gly	Pro	Ile	Asn	Gln	Ala	Ser	Arg	Arg	
65					70					75					80	
Val	Gln	Pro	Gly	Lys	Ala	Asn	Pro	Glu	Arg	Arg	Ala	Asn	Asp	Ser	Asp	
85					90					95						
Ser	Gln	Gly	Lys	Ala												
100																

&lt;210&gt; 3446

&lt;211&gt; 175

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3446

Met	His	Gly	Glu	Lys	Ser	His	Gly	Arg	Gly	Gln	Ala	Gly	Arg	Gln	Val
1				5					10					15	
Pro	Leu	Lys	Gln	Gln	Ser	Val	Ser	Gly	Glu	Ser	Gln	Gln	Gly	Ala	Arg
			20					25					30		
Gln	Gly	Ala	Gly	Gln	Ser	Thr	Cys	Tyr	Leu	Ser	Ser	Ala	Phe	Leu	Cys
		35					40					45			
Asn	Gly	Ser	Phe	Pro	Ala	Gly	Ser	Met	Ser	Leu	Trp	Asp	Pro	Gln	Pro
	50					55					60				
Lys	Gln	Ala	Phe	Pro	Ser	Val	Leu	Trp	Cys	Ser	Trp	Ala	Gly	Val	Pro
65					70					75				80	
Gly	Arg	Arg	Thr	Gly	Gln	Arg	Asp	Pro	Arg	Val	Gln	Glu	Arg	Arg	Gly
			85						90					95	
Asp	Phe	Val	Ser	Lys	Leu	Gly	Ala	Ala	Val	Gly	Gly	Glu	Pro	Leu	Ala
		100						105					110		
Leu	Phe	Gly	Pro	His	Ser	Trp	Pro	Gly	Met	Gly	His	Arg	Val	Pro	Gly
	115						120					125			
Leu	Gly	Ala	Gly	Phe	Leu	Leu	Phe	Ala	Gly	Phe	Ala	Leu	Glu	Pro	Trp
130					135						140				

Asp Ser Tyr His Val Val Phe Glu Gly Trp Thr Ile Asp Met Arg Arg  
 145 150 155 160  
 Asn Glu Pro Glu Arg Thr Arg Ser Leu Ser Ala Pro Gly Pro Leu  
 165 170 175

<210> 3447

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3447

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly  
 1 5 10 15  
 Val His Cys Glu Ala Gln Val Val Glu Ser Gly Gly Gly Leu Val Gln  
 20 25 30  
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe  
 35 40 45  
 Ser Ser Phe Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu  
 50 55 60  
 Glu Trp Val Ala Ser Ile Asn Lys Asp Gly Arg Asp Ser Tyr Tyr Val  
 65 70 75 80  
 Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Thr  
 85 90 95  
 Ser Leu Tyr Leu Gln Met Gly Ser Leu Arg Ala Glu Asp Thr Ala Val  
 100 105 110  
 Tyr Tyr Cys Ala Arg Lys Phe Met Phe Asp Ser Trp Ser Ser Tyr Tyr  
 115 120 125  
 Val Glu Gly His Tyr Phe Asp Leu Trp Gly Arg Gly Thr Gln Val Thr  
 130 135 140  
 Val Ser Ser Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu  
 145 150 155 160  
 Asp Ser Thr Pro Gln Asp Gly Asn Val Val Val Ala Cys Leu Val Gln  
 165 170 175  
 Gly Phe Phe Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly  
 180 185 190

Gln Asn Val Thr Ala Arg Asn Phe Pro Pro Ser Gln Asp Ala Ser Gly  
 195 200 205  
 Asp Leu Tyr Thr Thr Ser Ser Gln Leu Thr Leu Pro Ala Thr Gln Cys  
 210 215 220  
 Pro Asp Gly Lys Ser Val Thr Cys His Val Lys His Tyr Thr Asn Pro  
 225 230 235 240  
 Ser Gln Asp Val Thr Val Pro Cys Pro Val Pro Pro Pro Pro Pro Cys  
 245 250 255  
 Cys His Pro Arg Leu Ser Leu His Arg Pro Ala Leu Glu Asp Leu Leu  
 260 265 270  
 Leu Gly Ser Glu Ala Asn Leu Thr Cys Thr Leu Thr Gly Leu Arg Asp  
 275 280 285  
 Ala Ser Gly Ala Thr Phe Thr Trp Thr Pro Ser Ser Gly Lys Ser Ala  
 290 295 300  
 Val Gln Gly Pro Pro Glu Arg Asp Leu Cys Gly Cys Tyr Ser Val Ser  
 305 310 315 320  
 Ser Val Leu Pro Gly Cys Ala Gln Pro Trp Asn His Gly Glu Thr Phe  
 325 330 335  
 Thr Cys Thr Ala Ala His Pro Glu Leu Lys Thr Pro Leu Thr Ala Asn  
 340 345 350  
 Ile Thr Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro  
 355 360 365  
 Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys  
 370 375 380  
 Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln  
 385 390 395 400  
 Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg  
 405 410 415  
 Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu  
 420 425 430  
 Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met  
 435 440 445  
 Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp  
 450 455 460  
 Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala  
 465 470 475 480

Glu Val Asp Gly Thr Cys Tyr

485

<210> 3448

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3448

Met Ala Ser Phe Pro Leu Leu Leu Thr Leu Leu Thr His Cys Ala Gly  
 1 5 10 15  
 Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr  
 20 25 30  
 Pro Gly Gln Thr Val Thr Ile Ser Cys Ser Gly Ala Ser Ser Asn Ile  
 35 40 45  
 Gly Arg Asn Ser Val Asn Trp Phe Gln Gln Leu Pro Gly Thr Ala Pro  
 50 55 60  
 Lys Leu Leu Asn His Asn Asn Asn Gln Arg Pro Ala Gly Val Pro Asp  
 65 70 75 80  
 Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser  
 85 90 95  
 Gly Leu His Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp  
 100 105 110  
 Asn Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val  
 115 120 125  
 Leu Gly Glu Ser Leu Leu Pro Ser Pro Ser Pro Leu Leu Gly Gln Phe  
 130 135 140  
 Leu Leu Phe Leu Phe Val Ser Leu Cys Cys Leu Lys Leu Trp Ser Asp  
 145 150 155 160  
 Phe Leu Pro Thr Ser Gln Ala  
 165

<210> 3449

<211> 425

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3449

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Met Val Pro Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr
  1             5             10             15
Pro Arg Gln Asp Trp Thr Gly Ser Thr Pro Ala Tyr Gly Tyr Trp Phe
      20             25             30
Lys Ala Val Thr Glu Thr Thr Lys Gly Ala Pro Val Ala Thr Asn His
      35             40             45
Gln Ser Arg Glu Val Glu Met Ser Thr Arg Gly Arg Phe Gln Leu Thr
      50             55             60
Gly Asp Pro Ala Lys Gly Asn Cys Ser Leu Val Ile Arg Asp Ala Gln
      65             70             75             80
Met Gln Asp Glu Ser Gln Tyr Phe Phe Arg Val Glu Arg Gly Ser Tyr
      85             90             95
Val Arg Tyr Asn Phe Met Asn Asp Gly Phe Phe Leu Lys Val Thr Val
      100            105            110
Leu Ser Phe Thr Pro Arg Pro Gln Asp His Asn Thr Asp Leu Thr Cys
      115            120            125
His Val Asp Phe Ser Arg Lys Gly Val Ser Val Gln Arg Thr Val Arg
      130            135            140
Leu Arg Val Ala Tyr Ala Pro Arg Asp Leu Val Ile Ser Ile Ser Arg
      145            150            155            160
Asp Asn Thr Pro Asp Pro Pro Glu Asn Leu Arg Val Met Val Ser Gln
      165            170            175
Ala Asn Arg Thr Val Leu Glu Asn Leu Gly Asn Gly Thr Ser Leu Pro
      180            185            190
Val Leu Glu Gly Gln Ser Leu Cys Leu Val Cys Val Thr His Ser Ser
      195            200            205
Pro Pro Ala Arg Leu Ser Trp Thr Gln Arg Gly Gln Val Leu Ser Pro
      210            215            220
Ser Gln Pro Ser Asp Pro Gly Val Leu Glu Leu Pro Arg Val Gln Val
      225            230            235            240
Glu His Glu Gly Glu Phe Thr Cys His Ala Arg His Pro Leu Gly Ser
      245            250            255

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Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu Ile  
                   260                                  265                                  270  
 Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala  
                   275                                  280                                  285  
 Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys  
                   290                                  295                                  300  
 Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser  
 305                                  310                                  315                                  320  
 Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Val  
                                   325                                  330                                  335  
 Gln Lys Arg Asn Gln Lys Ala Thr Pro Ser Ser Pro Arg Thr Pro Leu  
                                   340                                  345                                  350  
 Pro Pro Gly Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln  
                                   355                                  360                                  365  
 Tyr Gln Leu Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro  
                   370                                  375                                  380  
 Glu Ser Gln Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe  
 385                                  390                                  395                                  400  
 Pro Gly Val Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln  
                                   405                                  410                                  415  
 Ala Asp Tyr Ala Glu Val Lys Phe Gln  
                   420                                  425

<210> 3450

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3450

Met Val Thr Leu Arg Ser Lys Leu Gly Pro Leu Glu Ile Gln Gln Phe  
   1                                  5                                  10                                  15  
 Ala Met Leu Leu Arg Glu Tyr Arg Leu Gly Leu Pro Ile Gln Asp Tyr  
                   20                                  25                                  30  
 Cys Thr Gly Leu Leu Lys Leu Tyr Gly Asp Arg Arg Lys Phe Leu Leu  
                   35                                  40                                  45



Leu Gly Met Arg Pro Phe Ile Pro Asp Gln Asp Ile Gly Tyr Phe Glu  
           50                          55                          60  
 Gly Phe Leu Glu Gly Val Gly Ile Arg Glu Gly Gly Ile Leu Thr Asp  
       65                          70                          75                          80  
 Ser Phe Gly Arg Ile Lys Arg Ser Met Ser Ser Thr Ser Ala Ser Ala  
                           85                          90                          95  
 Val Arg Ser Tyr Asp Gly Ala Ala Gln Arg Pro Glu Ala Gln Ala Phe  
                           100                          105                          110  
 His Arg Leu Leu Ala Asp Ile Thr His Asp Ile Glu Ala Leu Ala Pro  
           115                          120                          125  
 Asp Asp Asp Asp Asp Asp Glu Asp Glu Pro Arg Gly Ser Arg Gly Gly  
           130                          135                          140  
 Ser Asp Ala Ala Glu Asp Asn Tyr Leu  
       145                          150

<210> 3451

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3451

Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe  
       1                          5                          10                          15  
 Ser Asn Ser Asp Glu Ala Val Ile Asn Lys Lys Leu Pro Lys Glu Leu  
           20                          25                          30  
 Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Val Thr Leu Cys Arg Cys  
           35                          40                          45  
 Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn  
           50                          55                          60  
 Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg  
       65                          70                          75                          80  
 Val Val Glu Asn Ile Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu  
           85                          90                          95  
 Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe

100	105	110
Ala Gln Asn Cys Arg Asn Ile Glu Val Leu Asn Leu Asn Gly Cys Thr		
115	120	125
Lys Thr Thr Asp Ala Thr Cys Thr Ser Leu Ser Lys Phe Cys Ser Lys		
130	135	140
Leu Arg His Leu Asp Leu Ala Ser Cys Thr Ser Ile Thr Asn Met Ser		
145	150	155
Leu Lys Ala Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile		
165	170	175
Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg		
180	185	190
Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys Gly Cys Thr Gln Leu		
195	200	205
Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His Cys Pro Glu Leu Val		
210	215	220
Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr Asp Glu Gly Leu Ile		
225	230	235
Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser Leu Cys Ala Ser Gly		
245	250	255
Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala Leu Gly Gln Asn Cys		
260	265	270
Pro Arg Leu Arg Ile Leu Glu Val Ala Arg Cys Ser Gln Leu Thr Asp		
275	280	285
Val Gly Phe Thr Thr Leu Ala Arg Asn Cys His Glu Leu Glu Arg Met		
290	295	300
Asp Leu Glu Glu Cys Val Gln Ile Thr Asp Ser Thr Leu Ile Gln Leu		
305	310	315
Ser Ile His Cys Pro Arg Leu Gln Val Leu Ser Leu Ser His Cys Glu		
325	330	335
Leu Ile Thr Asp Asp Gly Ile Arg His Leu Gly Asn Gly Ala Cys Ala		
340	345	350
His Asp Gln Leu Glu Val Ile Glu Leu Asp Asn Cys Pro Leu Ile Thr		
355	360	365
Asp Ala Ser Leu Glu His Leu Lys Ser Cys His Ser Leu Glu Arg Ile		
370	375	380
Glu Leu Tyr Asp Cys Gln Gln Ile Thr Arg Ala Gly Ile Lys Arg Leu		

385                      390                      395                      400  
 Arg Thr His Leu Pro Asn Ile Lys Val Tyr Ala Tyr Phe Ser Pro Val  
                          405                      410                      415  
 Thr Pro Pro Pro Ser Val Gly Gly Ser Arg Gln Arg Phe Cys Arg Cys  
                          420                      425                      430  
 Cys Ile Ile Leu  
                          435

<210> 3452

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3452

Met Gly Ala Thr Glu Ala Ala Gly Gly Ala Ala Val Ser Arg Ala Arg  
   1                      5                      10                      15  
 Asn Gln Thr Trp Thr Ala Leu Gly Pro Gly Cys Arg Asp Gln Val Thr  
                          20                      25                      30  
 Arg Ser Pro Glu Gly Cys Trp Pro Arg Ser Gln Asn Pro Gly Ala Ala  
                          35                      40                      45  
 Arg Thr Ile Gly Ser Ser Leu Tyr Gly Thr Gly Asp Arg His Pro Ala  
                          50                      55                      60  
 Leu Val Pro Cys Ala Val Ala Asp Gly Glu Thr Glu Ala Ser Ser Leu  
                          65                      70                      75                      80  
 Pro Gly Ile Thr Val Ile Leu Glu Gln Arg Gly Pro Glu Arg Ala Cys  
                          85                      90                      95  
 Ser Trp Pro Lys Val Thr Gln  
                          100

<210> 3453

<211> 319

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3453

Met Ala Ser Asp Asp Phe Asp Ile Val Ile Glu Ala Met Leu Glu Ala  
 1 5 10 15  
 Pro Tyr Lys Lys Glu Glu Asp Glu Gln Gln Arg Lys Glu Val Lys Lys  
 20 25 30  
 Asp Tyr Pro Ser Asn Thr Thr Ser Ser Thr Ser Asn Ser Gly Asn Glu  
 35 40 45  
 Thr Ser Gly Ser Ser Thr Ile Gly Glu Thr Ser Lys Lys Lys Arg Ser  
 50 55 60  
 Arg Ser His Asn Lys Ser Arg Asp Arg Lys Arg Ser Arg Ser Arg Asp  
 65 70 75 80  
 Arg Asp Arg Tyr Arg Arg Arg Asn Ser Arg Ser Arg Ser Pro Gly Arg  
 85 90 95  
 Gln Cys Arg His Arg Ser Arg Ser Trp Asp Arg Arg His Gly Ser Glu  
 100 105 110  
 Ser Arg Ser Arg Asp His Arg Arg Glu Asp Arg Val His Tyr Arg Ser  
 115 120 125  
 Pro Pro Leu Ala Thr Gly Tyr Arg Tyr Gly His Ser Lys Ser Pro His  
 130 135 140  
 Phe Arg Glu Lys Ser Pro Val Arg Glu Pro Val Asp Asn Leu Ser Pro  
 145 150 155 160  
 Glu Glu Arg Asp Ala Arg Thr Val Phe Cys Met Gln Leu Ala Ala Arg  
 165 170 175  
 Ile Arg Pro Arg Asp Leu Glu Asp Phe Phe Ser Ala Val Gly Lys Val  
 180 185 190  
 Arg Asp Val Cys Ile Ile Ser Asp Arg Asn Ser Arg Arg Ser Lys Gly  
 195 200 205  
 Ile Ala Tyr Val Glu Phe Cys Glu Ile Gln Ser Val Pro Leu Ala Ile  
 210 215 220  
 Gly Leu Thr Gly Gln Arg Leu Leu Gly Val Pro Ile Ile Val Gln Ala  
 225 230 235 240  
 Ser Gln Ala Glu Lys Asn Arg Leu Ala Ala Met Ala Asn Asp Leu Gln  
 245 250 255  
 Lys Gly Asn Gly Gly Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe  
 260 265 270  
 Asn Ile Thr Glu Asp Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Lys

275                      280                      285  
 Ile Asp Asn Ile Val Leu Met Lys Asp Ser Asp Thr Gly Arg Ser Lys  
 290                      295                      300  
 Gly Tyr Gly Phe Ile Thr Leu His Pro Pro Pro Leu Gly Thr Val  
 305                      310                      315

<210> 3454

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3454

Met Gly Lys Arg Asp Pro Arg Ala Gln Leu Phe Leu Pro Ser Ala Gly  
 1                      5                      10                      15  
 Leu Leu Gln Thr Ser Arg Leu His Cys Arg Leu Arg His Phe Leu Ala  
 20                      25                      30  
 Glu Pro Pro Ser Phe Leu Leu Ser Phe Gln Leu Leu Leu Leu His Cys  
 35                      40                      45  
 Pro Phe Leu Ser Pro Leu Ser Cys Thr Ser Ala Ser Ile Leu Ala Ser  
 50                      55                      60  
 Ser Ser Leu Lys Thr Gln Pro Asp Thr Ile Ser Ile Ile Thr Leu Phe  
 65                      70                      75                      80  
 Ile Ser Gln Trp Arg Arg Trp Gly Ser Arg Gln Glu Arg Gln Ser Val  
 85                      90                      95  
 Asn Met Leu Pro Leu Lys Phe Cys Thr Ala Leu Ser Leu Leu Gly Leu  
 100                      105                      110  
 Trp Ala Lys Ile Lys Cys Lys Ser Leu Tyr Tyr Ser  
 115                      120

<210> 3455

<211> 375

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3455

Met Glu Asp Ser Glu Ala Leu Gly Phe Glu His Met Gly Leu Asp Pro  
 1 5 10 15  
 Arg Leu Leu Gln Ala Val Thr Asp Leu Gly Trp Ser Arg Pro Thr Leu  
 20 25 30  
 Ile Gln Glu Lys Ala Ile Pro Leu Ala Leu Glu Gly Lys Asp Leu Leu  
 35 40 45  
 Ala Arg Ala Arg Thr Gly Ser Gly Lys Thr Ala Ala Tyr Ala Ile Pro  
 50 55 60  
 Met Leu Gln Leu Leu Leu His Arg Lys Ala Thr Gly Pro Val Val Glu  
 65 70 75 80  
 Gln Ala Val Arg Gly Leu Val Leu Val Pro Thr Lys Glu Leu Ala Arg  
 85 90 95  
 Gln Ala Gln Ser Met Ile Gln Gln Leu Ala Thr Tyr Cys Ala Arg Asp  
 100 105 110  
 Val Arg Val Ala Asn Val Ser Ala Ala Glu Asp Ser Val Ser Gln Arg  
 115 120 125  
 Ala Val Leu Met Glu Lys Pro Asp Val Val Val Gly Thr Pro Ser Arg  
 130 135 140  
 Ile Leu Ser His Leu Gln Gln Asp Ser Leu Lys Leu Arg Asp Ser Leu  
 145 150 155 160  
  
 Glu Leu Leu Val Val Asp Glu Ala Asp Leu Leu Phe Ser Phe Gly Phe  
 165 170 175  
 Glu Glu Glu Leu Lys Ser Leu Leu Cys His Leu Pro Arg Ile Tyr Gln  
 180 185 190  
 Ala Phe Leu Met Ser Ala Thr Phe Asn Glu Asp Val Gln Ala Leu Lys  
 195 200 205  
 Glu Leu Ile Leu His Asn Pro Val Thr Leu Lys Leu Gln Glu Ser Gln  
 210 215 220  
 Leu Pro Gly Pro Asp Gln Leu Gln Gln Phe Gln Val Val Cys Glu Thr  
 225 230 235 240  
 Glu Glu Asp Lys Phe Leu Leu Leu Tyr Ala Leu Leu Lys Leu Ser Leu  
 245 250 255  
 Ile Arg Gly Lys Ser Leu Leu Phe Val Asn Thr Leu Glu Arg Ser Tyr  
 260 265 270

Arg Leu Arg Leu Phe Leu Glu Gln Phe Ser Ile Pro Thr Cys Val Leu  
 275 280 285  
 Asn Gly Glu Leu Pro Leu Arg Ser Arg Cys His Ile Ile Ser Gln Phe  
 290 295 300  
 Asn Gln Gly Phe Tyr Asp Cys Val Ile Ala Thr Asp Ala Glu Val Leu  
 305 310 315 320  
 Gly Ala Pro Val Lys Gly Lys Arg Arg Gly Arg Gly Pro Lys Gly Asp  
 325 330 335  
 Lys Ala Ser Asp Pro Glu Ala Gly Val Ala Arg Gly Ile Asp Phe His  
 340 345 350  
 His Val Ser Ala Val Leu Asn Phe Asp Leu Pro Pro Thr Pro Glu Ala  
 355 360 365  
 Tyr Ile His Arg Ala Gly Arg  
 370 375

<210> 3456

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3456

Met Leu Pro Glu Asp Ser Gly Gly Ser Pro Asp Ala Ala Ala Ser Asp  
 1 5 10 15  
 Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val Trp  
 20 25 30  
 Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser Glu  
 35 40 45  
 Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala Glu  
 50 55 60  
 Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg Asp  
 65 70 75 80  
 Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys Val  
 85 90 95  
 Glu Met Glu Asp Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile His  
 100 105 110

Glu	Glu	Phe	Lys	Arg	Lys	Glu	Glu	Glu	Arg	Lys	Arg	Gly	Glu	Glu	
115			120			125									
Gln	Ile	Arg	Leu	Gln	Glu	Glu	Gln	Arg	Ala	Lys	Glu	Leu	Tyr	Trp	Thr
130			135			140									
Leu	Lys	Gln	Ala	Gln	Leu	His	Cys	Gln	Ala	Ser	Glu	Lys	Glu	Glu	Arg
145			150			155			160						
Glu	Trp	Glu	Glu	Gln	Leu	Arg	Arg	Ser	Lys	Ala	Ala	Asp	Glu	Glu	Arg
165			170			175									
Ser	Arg	Arg	Ala	Gln	Arg	Ala	Arg	Asp	Glu	Tyr	Arg	His	His	Ser	Leu
180			185			190									
Arg	Ala	Ile	Gln	Lys	Gly	Thr	Val	Ala	Gly	Leu	Ser	Ser	Met	Phe	Arg
195			200			205									
Glu	Leu	Gly	Gln	Ser	His	Glu	Gln	Glu	Ala	Arg	Leu	Tyr	His	His	Leu
210			215			220									
Pro	Asp	Pro	Gly	Leu	Pro	Gln	Pro	Leu	Ala	Leu	Pro	Val	Ser	Arg	Thr
225			230			235			240						
Trp	Glu	Arg	Pro	Leu	Arg	Pro	Val	Ser	Arg	Asp	Val	Ile	Val	Arg	Trp
245			250			255									
Phe	Lys	Glu	Glu	Gln	Leu	Pro	Arg	Arg	Ala	Gly	Phe	Glu	Arg	Asn	Thr
260			265			270									
Lys	Phe	Ile	Ala	Pro	Trp	Phe	His	Gly	Gly	Asn	Tyr	His	Cys	Phe	Arg
275			280			285									
Arg	Arg	Val	Thr	Ser	Gly	Thr	Leu	Arg	Thr	Glu	Gly	Gln	Pro	Thr	Arg
290			295			300									
Leu	Pro	Ser	Val	Val											
305															

&lt;210&gt; 3457

&lt;211&gt; 235

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3457

Met Gln Ala Ser Leu Leu Leu Ser Cys Leu Pro Leu Ser Ser Leu Ser  
1 5 10 15



Thr Val Ile Val Pro Pro Phe Leu Gln Val Asn Asp Leu Asp Gly Tyr  
                   20                                  25                                  30  
 Asn Arg Thr Ala Leu His Tyr Ala Ala Glu Lys Asp Glu Ala Cys Val  
                   35                                  40                                  45  
 Glu Val Leu Leu Glu Tyr Gly Ala Asn Pro Asn Ala Leu Asp Gly Asn  
                   50                                  55                                  60  
 Arg Asp Thr Pro Leu His Trp Ala Ala Phe Lys Asn Asn Ala Glu Cys  
                   65                                  70                                  75                                  80  
 Val Arg Ala Leu Leu Glu Ser Gly Ala Ser Val Asn Ala Leu Asp Tyr  
                                   85                                  90                                  95  
 Asn Asn Asp Thr Pro Leu Ser Trp Ala Ala Met Lys Gly Asn Leu Glu  
                   100                                  105                                  110  
 Ser Val Ser Ile Leu Leu Asp Tyr Gly Ala Glu Val Arg Val Ile Asn  
                   115                                  120                                  125  
 Leu Ile Gly Gln Thr Pro Ile Ser Arg Leu Val Ala Leu Leu Val Arg  
                   130                                  135                                  140  
 Gly Leu Gly Thr Glu Lys Glu Asp Ser Cys Phe Glu Leu Leu His Arg  
                   145                                  150                                  155                                  160  
 Ala Val Gly His Phe Glu Leu Arg Lys Asn Gly Thr Met Pro Arg Glu  
                                   165                                  170                                  175  
 Val Ala Arg Asp Pro Gln Leu Cys Glu Lys Leu Thr Val Leu Cys Ser  
                   180                                  185                                  190  
 Ala Pro Gly Thr Leu Lys Thr Leu Ala Arg Tyr Ala Val Arg Arg Ser  
                   195                                  200                                  205  
 Leu Gly Leu Gln Tyr Leu Pro Asp Ala Val Lys Gly Leu Pro Leu Pro  
                   210                                  215                                  220  
 Ala Ser Leu Lys Glu Tyr Leu Leu Leu Leu Glu  
                   225                                  230                                  235

<210> 3458

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3458

Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys Leu  
 1 5 10 15  
 Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser Ala Ser  
 20 25 30  
 Ile Gly Leu Gln Thr Phe Asn His Ser Gly Ile Ser Val Asn Ile Gln  
 35 40 45  
 Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly Val Ala Asn Thr  
 50 55 60  
 Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys Leu Gly Gly Tyr Leu  
 65 70 75 80  
 Met Glu Thr Thr Gly Ser Trp Thr Cys Leu Phe Asn Leu Val Ala Ile  
 85 90 95  
 Ile Ser Asn Leu Gly Leu Cys Thr Phe Leu Val Phe Gly Gln Ala Gln  
 100 105 110  
 Arg Val Asp Leu Ser Ser Thr His Glu Asp Leu  
 115 120

<210> 3459

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3459

Met Lys Val Lys Gln Ala Leu Met Val Thr Leu Thr Gln Gln Asp Arg  
 1 5 10 15  
 Tyr Pro Tyr Gln Lys Gly Ile Ser Gly His Arg Asp Arg Arg Ala Arg  
 20 25 30  
 Val Glu Thr Pro Glu Asp Glu Asp Gly Ile Tyr Gln Ala Gly Glu Trp  
 35 40 45  
 Pro Gln Glu Lys Arg Ala Leu Pro Thr Pro Arg Pro Arg Thr Ser Ser  
 50 55 60  
 Leu Gln Ser Arg Val Lys Arg Asn Phe His His Leu Ser Cys Pro Val  
 65 70 75 80  
 Cys Gly Thr Leu Pro Arg Gln Pro Glu Gln Thr Val Gln Ala Pro Lys

	85	90	95												
Thr	Leu	Ser	Ala	Cys	Val	Ile	Leu	Ala	Arg	Thr	Thr	Leu	Pro	Glu	Ala
	100		105										110		
Thr	Ala	Met	Ser	Lys	Leu	Ile	Val	Arg	Phe	Leu	Pro	Ala	Thr	Trp	Phe
	115					120							125		

&lt;210&gt; 3460

&lt;211&gt; 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3460

Met	Leu	Arg	Leu	Arg	Lys	Gln	Gly	His	Val	Arg	Arg	Arg	Gly	Lys	Ser
1				5					10					15	
Ile	Gly	Glu	Asn	Lys	Asp	Thr	Gly	Gly	Asp	Ala	Thr	Trp	Arg	Ser	Pro
		20					25						30		
Glu	Ser	Arg	Glu	Thr	Asn	Glu	Pro	Arg	Thr	Gln	Met	Ala	Lys	Lys	Lys
		35					40						45		

Asn	Glu	Arg	Ile	Cys	Lys	Arg	Gln	His	Ser	Asn	Met	Pro	Asn	Lys	Ser
	50					55					60				
Arg	Val	Leu	Val	Phe	Lys	His	Leu	Tyr	Leu	Pro	Arg	Val	Thr	Arg	Gln
65					70					75				80	
Leu	Ile	Ser	Phe	His	Ile	Cys	Ser	Arg	Phe	Val	Phe	Arg	Asn	Lys	Thr
			85						90					95	
His	Val	Leu	Lys	Ser	Cys	Leu	Tyr	Val	Ala	Pro	Val	Leu	Leu	Pro	Pro
		100							105					110	
Pro	Pro	Val	Leu	Lys	Ser	Ile	Ser	Ala	Leu	Leu	Ile	Tyr	Gly		
		115						120					125		

&lt;210&gt; 3461

&lt;211&gt; 521

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3461

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Thr Leu Lys Gly  
 1 5 10 15  
 Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Lys  
 20 25 30  
 Pro Gly Gly Ser Leu Arg Leu Ser Cys Val Ala Ser Gly Phe Thr Phe  
 35 40 45  
 Ser Asn Thr Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu  
 50 55 60  
 Glu Trp Val Gly Arg Ile Ser Thr Asp Ser Glu Gly Ala Thr Val Asp  
 65 70 75 80  
 Tyr Ala Ala Pro Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asp Ser  
 85 90 95  
 Lys Lys Thr Leu Tyr Leu Gln Met Asn Ser Leu Gln Val Glu Asp Thr  
 100 105 110  
 Ala Val Tyr Tyr Cys Ser Thr Gly Pro Ser Arg Val Pro Gly Thr Gln  
 115 120 125  
 Arg Tyr Phe Asp Phe Trp Gly Arg Gly Thr Arg Val Thr Val Ser Ser  
 130 135 140  
 Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg  
 145 150 155 160  
 Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr  
 165 170 175  
 Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser  
 180 185 190  
 Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser  
 195 200 205  
 Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr  
 210 215 220  
 Tyr Thr Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys  
 225 230 235 240  
 Arg Val Glu Leu Lys Thr Pro Leu Gly Asp Thr Thr His Thr Cys Pro  
 245 250 255  
 Arg Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg  
 260 265 270

Cys Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys  
 275 280 285  
 Pro Glu Pro Lys Ser Cys Asp Thr Pro Pro Pro Cys Pro Arg Cys Pro  
 290 295 300  
 Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys  
 305 310 315 320  
 Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val  
 325 330 335  
 Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln Phe Lys Trp Tyr  
 340 345 350  
 Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu  
 355 360 365  
 Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu Thr Val Leu His  
 370 375 380  
 Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys  
 385 390 395 400  
 Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Thr Lys Gly Gln  
 405 410 415  
 Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Glu Glu Met  
 420 425 430  
 Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro  
 435 440 445  
 Ser Asp Ile Ala Val Glu Trp Glu Ser Ser Gly Gln Pro Glu Asn Asn  
 450 455 460  
 Tyr Asn Thr Thr Pro Pro Met Leu Asp Ser Asp Gly Ser Phe Phe Leu  
 465 470 475 480  
 Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Ile  
 485 490 495  
 Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln  
 500 505 510  
 Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 515 520

&lt;210&gt; 3462

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3462

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Met Ile Ser Pro Asp Pro Arg Pro Ser Pro Gly Leu Ala Arg Trp Ala
  1             5             10             15
Glu Ser Tyr Glu Ala Lys Cys Glu Arg Arg Gln Glu Ile Arg Glu Ser
      20             25             30
Arg Arg Cys Arg Pro Asn Val Thr Thr Cys Arg Gln Val Gly Lys Thr
      35             40             45
Leu Arg Ile Gln Gln Arg Glu Gln Leu Gln Arg Ala Arg Leu Gln Gln
      50             55             60
Phe Phe Arg Arg Arg Asn Leu Glu Leu Glu Glu Lys Gly Lys Ala Gln
      65             70             75             80
His Pro Gln Ala Arg Glu Gln Gly Pro Ser Arg Arg Pro Gly Gln Val
      85             90             95
Thr Val Leu Lys Glu Pro Leu Ser Cys Ala Arg Arg Ile Ser Ser Pro
      100            105            110
Arg Glu Gln Val Thr Gly Thr Ser Ser Glu Val Phe Pro Ala Gln His
      115            120            125
Pro Pro Pro Ser Gly Ile Cys Arg Asp Leu Ser Asp His Leu Ser Ser
      130            135            140
Gln Ala Gly Gly Leu Pro Pro Gln Asp Thr Pro Ile Lys Lys Pro Pro
      145            150            155            160
Lys His His Arg Gly Thr Gln Thr Lys Ala Glu Gly Pro Thr Ile Lys
      165            170            175
Asn Asp Ala Ser Gln Gln Thr Asn Tyr Gly Val Ala Val Leu Asp Lys
      180            185            190
Glu Ile Ile Gln Leu Ser Asp Tyr Leu Lys Glu Ala Leu Gln Arg Glu
      195            200            205
Leu Val Leu Lys Gln Lys Met Val Ile Leu Gln Asp Leu Leu Ser Thr
      210            215            220
Leu Ile Gln Ala Ser Asp Ser Ser Trp Lys Gly Gln Leu Asn Glu Asp
      225            230            235            240
Lys Leu Lys Gly Lys Leu Arg Ser Leu Glu Asn Gln Leu Tyr Thr Cys
      245            250            255

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Thr Gln Lys Tyr Ser Pro Trp Gly Met Lys Lys Val Leu Leu Glu Met  
 260 265 270  
 Glu Asp Gln Lys Asn Ser Tyr Glu Gln Lys Ala Lys Glu Ser Leu Gln  
 275 280 285  
 Lys Val Leu Glu Glu Lys Met Asn Ala Glu Gln Gln Leu Gln Ser Thr  
 290 295 300  
 Gln Arg Ser Leu Ala Leu Ala Glu Gln Lys Cys Glu Glu Trp Arg Ser  
 305 310 315 320  
 Gln Tyr Glu Ala Leu Lys Glu Asp Trp Arg Thr Leu Gly Thr Gln His  
 325 330 335  
 Arg Glu Leu Glu Ser Gln Leu His Val Leu Gln Ser Lys Leu Gln Gly  
 340 345 350  
 Ala Asp Ser Arg Asp Leu Gln Met Asn Gln Ala Leu Arg Phe Leu Glu  
 355 360 365  
 Asn Glu His Gln Glu Leu Gln Ala Lys Ile Glu Cys Leu Gln Gly Asp  
 370 375 380  
 Arg Asp Leu Cys Ser Leu Asp Thr Gln Asp Leu Gln Asp Gln Leu Lys  
 385 390 395 400  
 Arg Ser Glu Ala Glu Lys Leu Thr Leu Val Thr Arg Val Gln Gln Leu  
 405 410 415  
 Gln Gly Leu Leu Gln Asn Gln Ser Leu Gln Leu Gln Glu Gln Glu Lys  
 420 425 430  
 Leu Leu Thr Lys Lys Asp Gln Ala Leu Pro Val Trp Ser Pro Lys Ser  
 435 440 445  
 Phe Pro Asn Glu Val Glu Pro Glu Gly Thr Gly Lys Glu Lys Asp Trp  
 450 455 460  
 Asp Leu Arg Asp Gln Leu Gln Lys Lys Thr Leu Gln Leu Gln Ala Lys  
 465 470 475 480  
 Glu Lys Glu Cys Arg Glu Leu His Ser Glu Leu Gly Asn Leu Ser Asp  
 485 490 495  
 Glu Tyr Leu Ser Cys Leu Arg Lys Leu Gln His Cys Arg Glu Glu Leu  
 500 505 510  
 Asn Gln Ser Gln Gln Leu Pro Pro Arg Arg Gln Cys Gly Arg Trp Leu  
 515 520 525  
 Pro Val Leu Met Val Val Ile Ala Ala Ala Leu Ala Val Phe Leu Ala  
 530 535 540

Asn Lys Asp Asn Leu Met Ile

545

550

<210> 3463

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 3463

Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly

1

5

10

15

Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro

20

25

30

His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe

35

40

45

Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala

50

55

60

Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro

65

70

75

80

Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser

85

90

95

Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu

100

105

110

Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala

115

120

125

Ala Pro Lys Pro Val Tyr Arg Asn Pro Leu Cys Tyr Gly Leu Ser Thr

130

135

140

Cys Leu Gly Glu Gly Ala Val Lys Arg Pro Leu Asp Val Asp Trp Thr

145

150

155

160

Leu Ala Thr Gly Pro Leu Leu Pro Ser Ala Asp Pro Pro Cys Ser Leu

165

170

175

Ala Pro Ala Pro Ser Lys Gly Gln Thr Leu Asp Gly Thr Phe Leu Arg

180

185

190

Gly Val Pro Ala Glu Gly Ser Ser Lys Asp Ser Ser Gly Ser Phe Ser

195

200

205



Pro Cys Gln Pro Phe Leu Glu Lys Tyr Gln Thr Ile His Ser Thr Gly  
 210 215 220  
 Phe Leu Ala Ser Arg Tyr Thr Gly Pro Tyr Pro Arg Asn Ser Lys Gln  
 225 230 235 240  
 Ala Met Ser Glu Gly Pro Ser Ser Pro Trp Thr Gln Leu Ala Gln Pro  
 245 250 255  
 Leu Gly Pro Pro Cys Gln Asp Thr Gly Pro Thr His Tyr Pro Pro Pro  
 260 265 270  
 His His Pro Pro Pro His Pro Pro Gln Ala Leu Pro Cys Pro Pro Ala  
 275 280 285  
 Cys Arg His Pro Glu Lys Gln Gly Ser Tyr Ser Pro Ala Leu Pro Leu  
 290 295 300  
 Gln Pro Leu Gly Gly His Lys Gly Thr Gly Tyr Gln Ala Gly Gly Leu  
 305 310 315 320  
 Gly Ser Pro Tyr Leu Arg Gln Gln Ala Ala Gln Ala Pro Tyr Ile Pro  
 325 330 335  
 Pro Leu Gly Leu Asp Ala Tyr Pro Tyr Pro Ser Ala Pro Leu Pro Ala  
 340 345 350  
 Pro Ser Pro Gly Leu Lys Leu Glu Pro Pro Leu Thr Pro Arg Cys Pro  
 355 360 365  
 Leu Asp Phe Ala Pro Gln Thr Leu Ser Phe Pro Tyr Ala Arg Asp Asp  
 370 375 380  
 Leu Ser Leu Tyr Gly Ala Ser Pro Gly Leu Gly Gly Thr Pro Pro Ser  
 385 390 395 400  
 Gln Asn Asn Val Arg Ala Val Pro Gln Pro Gly Ala Phe Gln Arg Ala  
 405 410 415  
 Cys Gln Pro Leu Pro Ala Ser Gln Pro Cys Ser Glu Pro Val Arg Pro  
 420 425 430  
 Ala Gln Glu Ala Glu Glu Lys Thr Trp Leu Pro Ser Cys Arg Lys Glu  
 435 440 445  
 Lys Leu Gln Pro Arg Leu Ser Glu His Ser Gly Pro Pro Ile Val Ile  
 450 455 460  
 Arg Asp Ser Pro Val Pro Cys Thr Pro Pro Ala Leu Pro Pro Cys Ala  
 465 470 475 480  
 Arg Glu Cys Gln Ser Leu Pro Gln Lys Glu Asp Ala Arg Pro Pro Ser  
 485 490 495

Ser Pro Pro Met Pro Val Ile Asp Asn Val Phe Ser Leu Ala Pro Tyr  
 500 505 510  
 Arg Asp Tyr Leu Asp Val Pro Ala Pro Glu Ala Thr Thr Glu Pro Asp  
 515 520 525  
 Ser Ala Thr Ala Glu Pro Asp Ser Ala Pro Ala Thr Ser Glu Gly Gln  
 530 535 540  
 Asp Lys Gly Cys Arg Gly Thr Leu Pro Ala Gln Glu Gly Pro Ser Gly  
 545 550 555 560  
 Ser Lys Pro Leu Arg Gly Ser Leu Lys Glu Glu Val Ala Leu Asp Leu  
 565 570 575  
 Ser Val Arg Lys Pro Thr Ala Glu Ala Ser Pro Val Lys Ala Ser Arg  
 580 585 590  
 Ser Val Glu His Ala Lys Pro Thr Ala Ala Met Asp Val Pro Asp Val  
 595 600 605  
 Gly Asn Met Val Ser Asp Leu Pro Gly Leu Lys Lys Ile Asp Thr Glu  
 610 615 620  
 Ala Pro Gly Leu Pro Gly Val Pro Val Thr Thr Asp Ala Met Pro Arg  
 625 630 635 640  
 Thr Asn Phe His Ser Ser Val Ala Phe Met Phe Arg Lys Phe Lys Ile  
 645 650 655  
 Leu Arg Pro Ala Pro Leu Pro Ala Ala Val Val Pro Ser Thr Pro Thr  
 660 665 670  
 Ser Ala Pro Ala Pro Thr Gln Pro Ala Pro Thr Pro Thr Ser Gly Pro  
 675 680 685  
 Ile Gly Leu Arg Ile Leu Ala Gln Gln Pro Leu Ser Val Thr Cys Phe  
 690 695 700  
 Ser Leu Ala Leu Pro Ser Pro Pro Ala Val Ala Val Ala Ser Pro Ala  
 705 710 715 720  
 Pro Ala Pro Ala Pro Ser Pro Ala Pro Ala Arg Ala Gln Ala Pro Ala  
 725 730 735  
 Ser Ala Arg Asp Pro Ala Pro Ala Pro Ala Pro Val Ala Gly Pro Ala  
 740 745 750  
 Pro Ala Ser Thr Ser Ala Pro Gly Asp Ser Leu Glu Gln His Phe Thr  
 755 760 765  
 Gly Leu His Ala Ser Leu Cys Asp Ala Ile Ser Gly Ser Val Ala His  
 770 775 780

Ser Pro Pro Glu Lys Leu Arg Glu Trp Leu Glu Thr Ala Gly Pro Trp  
 785 790 795 800  
 Gly Gln Ala Ala Trp Gln Asp Cys Gln Gly Val Gln Gly Leu Leu Ala  
 805 810 815  
 Lys Leu Leu Ser Gln Leu Gln Arg Phe Asp Arg Thr His Arg Cys Pro  
 820 825 830  
 Phe Pro His Val Val Arg Ala Gly Ala Ile Phe Val Pro Ile His Leu  
 835 840 845  
 Val Lys Glu Arg Leu Phe Pro Arg Leu Pro Pro Ala Ser Val Asp His  
 850 855 860  
 Val Leu Gln Glu His Arg Val Glu Leu Arg Pro Thr Thr Leu Ser Glu  
 865 870 875 880  
 Glu Arg Ala Leu Arg Glu Leu Ala Leu Pro Gly Cys Thr Ser Arg Met  
 885 890 895  
 Leu Lys Leu Leu Ala Leu Arg Gln Leu Pro Asp Ile Tyr Pro Asp Leu  
 900 905 910  
 Leu Gly Leu Gln Trp Arg Asp Cys Val Arg Arg Gln Leu Gly Asp Phe  
 915 920 925  
 Asp Thr Glu Ala Gly Ala Val Ser Ser Ser Glu Pro Thr Val Ala Arg  
 930 935 940  
 Asp Glu Pro Glu Ser Leu Ala Leu Ala Gln Lys Ser Pro Ala Pro Lys  
 945 950 955 960  
 Val Arg Lys Pro Gly Arg Lys Pro Pro Thr Pro Gly Pro Glu Lys Ala  
 965 970 975  
 Glu Ala Ala Ala Gly Glu Glu Ser Cys Gly Ala Ser Pro Thr Pro Ala  
 980 985 990  
 Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser  
 995 1000 1005  
 Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly  
 1010 1015 1020  
 His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu  
 1025 1030 1035 1040  
 Asp Ser Gln Ser His His Leu  
 1045

&lt;210&gt; 3464

&lt;211&gt; 358

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3464

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Met Gln Arg Ser Pro His Ala Ala Glu Thr Gly Val Pro Thr Gly Ser
  1             5             10             15
Ala Lys Val Thr Thr Thr Gln Gln Arg Gln Ala Ser Cys Gly Gln Cys
      20             25             30
Arg Gly His His His Ala Ala Glu Thr Gly Val Leu Trp Ala Val Gln
      35             40             45
Arg Ser Pro Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu
      50             55             60
Val Thr Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val
      65             70             75             80
Thr Thr Thr Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser
      85             90             95
Pro Pro Arg Ser Arg Asp Arg Arg Pro His Gly Gln Cys Lys Gly His
      100            105            110
His His Thr Ala Glu Ile Gly Val Leu Trp Ala Met Gln Arg Ser Pro
      115            120            125
Pro Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Pro
      130            135            140
Arg Ser Arg Asp Arg Arg Pro Val Gly Asp Ala Glu Val Thr Thr Thr
      145            150            155            160
Gln Gln Arg Arg Ala Ser Pro Gln Ala Val Gln Arg Ser Pro Pro His
      165            170            175
Ser Arg Asp Arg Arg Pro His Gly Gln Cys Arg Gly His His His Ala
      180            185            190
Ala Glu Thr Gly Val Pro Thr Gly Ser Ala Glu Val Thr Thr Thr Gln
      195            200            205
Gln Arg Gln Ala Ser Cys Gly Gln Cys Arg Gly His His His Ala Ala
      210            215            220
Glu Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg

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225                      230                      235                      240  
 Asp Gly Arg Pro His Arg Gln Cys Arg Gly His His His Thr Ala Glu  
                          245                      250                      255  
 Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg Asp  
                          260                      265                      270  
 Arg Arg Pro Val Gly Ser Ala Glu Val Thr Thr Leu Ser Gln Thr Val  
                          275                      280                      285  
 Leu Gly Leu Pro Trp Val Glu His Arg Met Lys Thr Met Cys Phe Glu  
                          290                      295                      300  
 Pro Trp Lys Asp Asn Gln Pro Ser Gln Ser Gln Ser Leu Lys Gln Ala  
 305                      310                      315                      320  
 Ala Pro Arg Ala Gln Leu Gln Glu Ala Ala Ser Ser Arg Gly Leu Gln  
                          325                      330                      335  
 Gln Gly Gly Gly Arg Cys Val Pro Ser Val Ala Ser Trp Cys Pro Leu  
                          340                      345                      350  
 Met Ser Arg Ser Val Arg  
                          355

<210> 3465

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3465

Met Ser Arg Ser Val Leu Glu Ala Leu Thr Ser Ser Thr Ala Met Gln  
   1                      5                      10                      15  
 Cys Val Pro Ser Asp Gly Cys Ala Met Leu Leu Arg Val Arg Ala Ser  
                          20                      25                      30  
 Ile Thr Leu His Glu Arg Leu Arg Gly Leu Glu Ala Cys Ala Met Ser  
                          35                      40                      45  
 Leu Asp Thr Gln Glu Thr Gln Cys Gln Ser Val Trp Val Ala Arg Ala  
                          50                      55                      60  
 Ser His Arg Gln Gln Arg Gly Arg Gln Leu Gln Val His Phe Gly Cys  
                          65                      70                      75                      80  
 Phe Ala Val Ser Val Ala Gln His Leu Tyr Val Thr Leu Arg Thr Ile

	85	90	95
Pro His Phe Cys Gly Val Gln Leu Asp Gln Arg His Leu Val Glu Ala			
	100	105	110
Gly Lys Leu Ser Tyr Trp Val Asp Arg Arg Arg Lys Ala Ile Leu Val			
	115	120	125
Gln Val Pro Arg Ala Ser Gly Ser Pro Asp Tyr Tyr Leu Arg Leu Cys			
	130	135	140
Leu Lys Arg Phe Thr Cys Glu Asp Ala Gly Ala Pro Val Arg Val Thr			
145	150	155	160
Ala Asn Ser Val Pro Gln Ala Val Phe Leu Pro Tyr Ser Gln Glu Leu			
	165	170	175
Pro Cys Leu Cys Leu Glu Gly Trp Ser Ala Thr Pro Asp Ala Val Arg			
	180	185	190
Ile Gln Ile Cys Pro Phe Glu Asn Asp Thr Glu Ala Leu Glu Val Leu			
	195	200	205
Trp Asp Thr Val Tyr Tyr His Pro Glu Ser Gln Thr Leu Ser Trp Glu			
	210	215	220
Pro Ala Cys Pro Val Ser Gly His Val Ser Leu Cys Trp Arg Pro Gly			
225	230	235	240
Pro Gly Ala Gly Cys Arg Lys Leu Gln Gln Ser Ser Gln Leu Val His			
	245	250	255
Arg Arg Val Gln Tyr Pro Leu Val Asp Thr Gln Pro Gln Leu Cys Leu			
	260	265	270
Lys Phe Ser Thr Ser Trp Gly Ser Trp Val Arg Cys Pro Phe Glu Gln			
	275	280	285
Arg Arg Phe Pro Thr Pro Pro Thr Ser Arg Cys Thr Cys Val Thr Gly			
	290	295	300
Gly Ser His Ser Ser Leu Pro Ala Asn Ala His Ser Arg Pro Ala Arg			
305	310	315	320
Ser Leu Gln Pro Gln Val Thr Trp Gln Pro Pro Leu Leu Leu Pro Ser			
	325	330	335

&lt;210&gt; 3466

&lt;211&gt; 295

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3466

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15  
 Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe  
 20 25 30  
 Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala  
 35 40 45  
 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala  
 50 55 60  
 Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly  
 65 70 75 80  
 Pro Glu Tyr Trp Asp Arg Asn Thr Arg Asn Val Lys Ala His Ser Gln  
 85 90 95  
 Thr Asp Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr  
 100 105 110  
 Asp Ala Pro Lys Thr His Met Thr His His Ala Val Ser Asp His Glu  
 115 120 125  
 Ala Thr Leu Arg Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr  
 130 135 140  
 Leu Thr Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu  
 145 150 155 160  
 Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ser  
 165 170 175  
 Val Val Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln  
 180 185 190  
 His Glu Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser  
 195 200 205  
 Gln Pro Thr Ile Pro Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe  
 210 215 220  
 Gly Ala Val Ile Ala Gly Ala Val Val Ala Ala Val Met Trp Arg Arg  
 225 230 235 240  
 Lys Ser Ser Gly Gly Glu Gly Met Lys Gly Gly Ser Glu Ile Ser Cys  
 245 250 255  
 Leu Thr Glu Gly Ser Lys Thr Gln Val Glu Val Cys Pro Ala Ser Leu

260 265 270  
 Leu Gly Ser Thr Ile His Asn Tyr Glu Pro Thr Gln Pro Gly Pro Cys  
 275 280 285  
 Val Pro Ala Leu Thr Leu Leu  
 290 295

<210> 3467

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3467

Met Glu Gly Leu Val Phe Leu Asn Ala Leu Ala Thr Arg Leu Leu Phe  
 1 5 10 15  
 Leu Leu His Ser Leu Val Gly Val Trp Arg Val Thr Glu Val Lys Lys  
 20 25 30  
 Glu Pro Arg Tyr Trp Leu Leu Ala Leu Leu Asn Leu Leu Leu Phe Leu  
 35 40 45  
 Glu Thr Ala Leu Thr Leu Lys Phe Lys Arg Gly Arg Gly Tyr Lys Trp  
 50 55 60  
 Phe Ser Pro Ala Ile Phe Leu Tyr Leu Ile Ser Ile Val Pro Ser Leu  
 65 70 75 80  
 Trp Leu Leu Glu Leu His His Glu Thr Gln Tyr Cys Ser Ile Gln Ala  
 85 90 95  
 Glu Gly Thr Ser Gln Asn Thr Ser Arg Lys Glu Asp Phe Asn Gln Thr  
 100 105 110  
 Leu Thr Ser Asn Glu Gln Thr Ser Arg Ala Asp Asp Leu Ile Glu Thr  
 115 120 125  
 Ala Lys Val Phe Val Asn Asn Leu Ser Thr Val Cys Glu Lys Val Trp  
 130 135 140  
 Thr Leu Gly Leu His Gln Thr Phe Leu Leu Met Leu Ile Ile Gly Arg  
 145 150 155 160  
 Trp Leu Leu Pro Ile Gly Gly Gly Ile Thr Arg Asp Gln Leu Ser Gln  
 165 170 175  
 Leu Leu Leu Met Phe Val Gly Thr Ala Ala Asp Ile Leu Glu Phe Thr



180	185	190
Ser Glu Thr Leu Glu Glu Gln Asn Val Arg Asn Ser Pro Ala Leu Val		
195	200	205
Tyr Ala Ile Leu Val Ile Trp Thr Trp Ser Met Leu Gln Phe Pro Leu		
210	215	220
Asp Leu Ala Val Gln Asn Val Val Cys Pro Val Ser Val Thr Glu Arg		
225	230	235
Gly Phe Pro Ser Leu Phe Phe Cys Gln Tyr Ser Ala Asp Leu Trp Asn		
245	250	255
Ile Gly Ile Ser Val Phe Ile Gln Asp Gly Pro Phe Leu Val Val Arg		
260	265	270
Leu Ile Leu Met Thr Tyr Phe Lys Val Ile Asn Gln Met Leu Val Phe		
275	280	285
Phe Ala Ala Lys Asn Phe Leu Val Val Val Leu Gln Leu Tyr Arg Leu		
290	295	300
Val Val Leu Ala Leu Ala Val Arg Ala Ser Leu Arg Ser Gln Ser Glu		
305	310	315
Gly Leu Lys Gly Glu His Gly Cys Arg Ala Gln Thr Ser Glu Ser Gly		
325	330	335
Pro Ser Gln Arg Asp Trp Gln Asn Glu Ser Lys Glu Gly Leu Ala Ile		
340	345	350
Pro Leu Arg Gly Ser Pro Val Thr Ser Asp Asp Ser His His Thr Pro		
355	360	365

&lt;210&gt; 3468

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3468

Met Gly Val Pro Asn Phe Leu Ser Phe Phe Ser Phe Leu Phe Phe Phe
1 5 10 15
Phe Lys Ser Leu Arg Gln Gly Leu Ala Gln Leu Pro Arg Leu Glu Cys
20 25 30

Ser	Gly	Thr	Ile	Ser	Ala	His	Cys	Ser	Leu	Asn	Leu	Leu	Gly	Ser	Ser
35						40						45			
Asp	Pro	Pro	Thr	Leu	Ala	Ser	Ser	Ile	Ser	Gly	Thr	Ala	Gly	Thr	His
50						55						60			
His	His	Ala	Gln	Leu	Ile	Phe	Phe	Phe	Phe	Phe	Leu	Arg	Gln	Gly	Leu
65						70						75			
Thr	Leu	Ser	Pro	Thr	Leu	Glu	Cys	Ser	Gly	Thr	Ile	Ser	Ala	His	Cys
			85						90						
Asn	Leu	Cys	Leu	Leu	Gly	Ser	Ser	Asp	Ser	Pro	Ala	Ser	Ala	Ser	Gln
			100						105						
Val	Ala	Gly	Asn	Thr	Gly	Val	His	His	His	Thr	Arg	Leu	Ile	Phe	Val
115						120						125			
Phe	Leu	Leu	Glu	Thr	Arg	Phe	Cys	His	Val	Gly	Gln	Thr	Gly	Leu	Lys
130						135						140			
Leu	Leu	Ile	Ser	Gly	Asp	Gln	Pro	Thr	Leu	Ala	Ser	Gln	Ser	Ala	Gly
145						150						155			
Ile	Thr	Gly	Met	Ser	Cys	Arg	Ala	Gln	Pro	Cys	Phe	Pro	Tyr	His	Leu
			165						170						
Ser	Arg	Ala	Pro	Cys	Val	Arg	Gly	Leu	Gly	Pro	Leu	Ser	His	His	Lys
180						185						190			
Leu	Gln	Arg	Gly	Ser	Ala	Ala	Thr								
195						200									

&lt;210&gt; 3469

&lt;211&gt; 128

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3469

Met Ile Gln Leu Pro Pro Thr Arg Ser Leu Ser Gln His Leu Gly Ile  
1 5 10 15  
Gln Gly Glu Ile Trp Val Gly Thr Gln Pro Asn His Ile Thr Ala Pro  
20 25 30  
Glu Leu Asn Phe Ser Trp Asn Cys Ser Ser Tyr Glu Gly Glu Phe Ser  
35 40 45



&lt;210&gt; 3471

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3471

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Met Gly Ile Ser Arg Thr Ala Pro Gln Gly Thr Gly Gly Ile Ile Leu
  1             5             10             15
Gln Gly Pro Leu Leu Pro Met Lys Asp Thr Arg Glu Met Leu Leu Arg
          20             25             30
Lys Leu Glu Leu Cys Ala Phe Asp His Leu Val Cys Pro Pro Ile Leu
          35             40             45
Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Pro Ser Glu Gly Leu
          50             55             60
Gly Glu Arg Arg Asn Ala Arg Gly Arg Cys Ala Leu Gln Arg Leu Tyr
          65             70             75             80
Gln His Gln Lys Lys Ala Gly Arg Val Phe Leu Glu Glu Gly Gly Arg
          85             90             95
Arg Pro Ala Val Ala Gly Arg Leu Ala Gly Gln Glu Arg Pro Ile Ser
          100            105            110
Ala Val Leu Ser Ser Gly Leu Gln His Pro Thr Trp Arg Thr Pro Leu
          115            120            125
Pro Leu Ser Ser Thr Val Ala Leu Leu Ser Trp Cys Pro Leu Asn Ala
          130            135            140
Tyr Leu Pro Phe Val Pro Pro Asn Leu Ser Arg Pro Pro Gln Val Thr
          145            150            155            160
His Phe Leu Ser Cys Ser Glu Leu
          165

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&lt;210&gt; 3472

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3472

Met Gly Trp Lys Lys Ile Gln Glu Ser Ser Ala Gln Ile Trp Trp Leu  
 1 5 10 15  
 Lys Glu Glu Gln Trp Pro Gln Glu Val Val Glu Gln Glu Gly Pro Arg  
 20 25 30  
 Ile Glu Pro Arg Arg Thr Met Val Phe Lys Gly Pro Ala Lys Glu Thr  
 35 40 45  
 Ser Arg Arg Lys Val Lys Ser Val Val Ser Gln Lys Ser Arg Glu Lys  
 50 55 60  
 Val Ser Arg Asn Ser Gln Gln Cys Glu Ile Leu Leu Cys Lys Ser Ile  
 65 70 75 80  
 Met Val Arg Ala Arg Lys Asp Pro Leu Asp Thr Thr Arg Trp Trp Ser  
 85 90 95  
 Gly Ile Val Pro Arg Thr Ala Ser Met Val Cys Trp Ser Ser Gln Leu  
 100 105 110  
 Pro Val Gly Leu Arg Ser Lys Gln Gly Arg Val Gln Arg Gly Arg Leu  
 115 120 125  
 Glu Arg Val Ala Ala Gly Gly Gly Cys Cys Phe Leu Gly Ser His Pro  
 130 135 140  
 His Ala Pro Thr Gly Cys His Ser Ala Trp Phe Pro Cys Leu Ala Pro  
 145 150 155 160  
 Leu Leu Pro Leu Pro Ser Ser Gly Leu Gln Asp Gly Leu Asp Ser Gly  
 165 170 175  
 Leu Ser Gly Tyr Ile Asp Leu Asn Lys Ser Pro Lys Phe  
 180 185

&lt;210&gt; 3473

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3473

Met Pro Arg Gly Leu Ala Asp Lys Gln Gly Pro Glu Glu Cys Asp Ala  
 1 5 10 15

Val Ala Leu Leu Ser Leu Ile Asn Ser Cys Asp His Phe Val Val Asp  
                   20                                  25                                  30  
 Arg Lys Lys Val Thr Glu Val Ile Lys Cys Arg Asn Glu Ile Met His  
                   35                                  40                                  45  
 Ser Ser Glu Met Lys Val Ser Ser Thr Trp Leu Arg Asp Phe Gln Met  
                   50                                  55                                  60  
 Lys Ile Gln Asn Phe Leu Asn Glu Phe Lys Asn Ile Pro Glu Ile Val  
                   65                                  70                                  75                                  80  
 Ala Val Tyr Ser Arg Ile Glu Gln Leu Leu Thr Ser Asp Trp Ala Val  
                                   85                                  90                                  95  
 His Ile Pro Glu Glu Asp Gln Arg Asp Gly Cys Glu Cys Glu Met Gly  
                   100                                  105                                  110  
 Thr Tyr Leu Ser Glu Ser Gln Val Asn Glu Ile Glu Met Gln Leu Leu  
                   115                                  120                                  125  
 Lys Glu Lys Leu Gln Glu Ile Tyr Leu Gln Ala Glu Glu Gln Glu Val  
                   130                                  135                                  140  
 Leu Pro Glu Glu Leu Ser Asn Arg Leu Glu Val Val Lys Glu Phe Leu  
                   145                                  150                                  155                                  160  
 Arg Asn Asn Glu Asp Leu Arg Asn Gly Leu Thr Glu Asp Met Gln Lys  
                                   165                                  170                                  175  
 Leu Asp Ser Leu Cys Leu His Gln Lys Leu Asp Ser Gln Glu Pro Gly  
                   180                                  185                                  190  
 Arg Gln Thr Pro Asp Arg Lys Ala  
                   195                                  200

<210> 3474

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3474

Met Asp Gly Arg Ala Ala Gly Gly Arg Gly Gly Gly Phe Leu Arg Arg  
                   1                                  5                                  10                                  15  
 Glu Val Gly Ser Leu Gln Pro Pro Ser His Cys Pro His Pro Thr Val  
                   20                                  25                                  30

Trp	Leu	Leu	Pro	Gly	Leu	Ser	Phe	Pro	Ile	Cys	Glu	Thr	Gly	Glu	Met
35					40					45					
Gly	Ser	Leu	Ser	Gly	Pro	Arg	Ser	Ile	Leu	Met	Gly	Val	Arg	Ala	Trp
50				55				60							
Gln	Gly	Leu	Cys	Arg	Leu	Gly	Ser	Glu	Leu	Gly	Arg	Pro	Gly	Cys	Val
65			70			75						80			
Ala	Thr	Gly	Val	Ser	Ala	Pro	Thr	Ser	Pro	Phe	Glu	Thr	Cys	Pro	Ala
85					90					95					
Phe	Leu	Phe	Ala	Ala	Ala	Thr	Ala	Val	Arg	Phe	Ala	Thr	Arg	Ser	Cys
100				105				110							
Gly	Cys	Pro	Pro	Arg	Gln	Gly	Asp								
115				120											

&lt;210&gt; 3475

&lt;211&gt; 155

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3475

Met	Glu	Pro	Leu	Asn	Ser	Ala	Val	Phe	Asn	Leu	Arg	Glu	Asp	Arg	Val
1					5				10					15	
Gly	Gln	Phe	Ser	Trp	Gln	Gln	Leu	Arg	Glu	Gly	Glu	Ser	Arg	Glu	Gln
			20					25					30		
Gly	Ser	Asp	Lys	Val	Cys	Leu	Ala	Gly	Ser	Lys	His	Phe	Met	Glu	Trp
		35				40					45				
Arg	Pro	Leu	Ala	Val	Arg	Asp	Leu	Arg	Lys	Ile	Cys	Gln	Gly	Leu	Leu
	50					55				60					
His	Ser	Glu	Gly	Leu	Gln	Phe	Gly	Trp	Leu	Gly	Thr	Leu	Leu	Pro	Cys
65					70					75				80	
Thr	Asp	Gly	Ala	Pro	Ile	Ser	Met	Thr	Arg	Val	Leu	Val	Gln	Thr	Gln
			85					90					95		
Phe	Ile	Val	Phe	Thr	Asn	Ser	Met	His	Ser	Asn	Gln	Thr	Glu	Ile	Glu
		100						105				110			
Ile	Gln	Tyr	Asn	Ile	Lys	Gly	Asp	Leu	Gly	Gln	Ala	Gln	Trp	Leu	Ile
	115					120					125				

Leu Val Ile Pro Ala Leu Trp Asp Ala Glu Leu Gly Gly Ser Leu Glu  
 130 135 140  
 Ala Arg Ser Leu Gly Pro Ala Trp Ala Arg Lys  
 145 150 155

<210> 3476  
 <211> 113  
 <212> PRT  
 <213> Homo sapiens

<400> 3476  
 Met Ile Ser Val His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser  
 1 5 10 15  
 Pro Ala Leu Ala Ser Gln Ile Ala Gly Ile Thr Gly Met His His His  
 20 25 30  
 Ala Arg Gln Ile Phe Ile Phe Leu Ile Glu Thr Gly Phe His His Val  
 35 40 45  
 Asp Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Tyr Leu Pro Ala Leu  
 50 55 60  
 Ala Ser Gln Ser Phe Gly Ile Thr Gly Val Ser His Arg Ala Trp Pro  
 65 70 75 80  
 Pro Leu Asn Thr Leu Lys Met Ser Gln Cys Ile Leu Val Ser Ile Phe  
 85 90 95  
 Tyr Ile Gly Lys Phe Val Val Asn Leu Ile Leu Ile Pro Val His Leu  
 100 105 110  
 Val

<210> 3477  
 <211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 3477



Met Leu Met Val Leu Phe Lys Tyr Trp Phe Val Ser Phe Gly Asp Val  
 1 5 10 15  
 Leu Val Phe Gln Gly Tyr Asp Cys Pro Asp Asn Gly Ser Ser Met Glu  
 20 25 30  
 Phe Leu Leu Ile Gly Ser Leu Pro Ser Thr Leu Ile Lys Ser Ile Phe  
 35 40 45  
 Cys Leu Phe Val Leu Arg Gln Ser Phe Ala Leu Val Ala Gln Ala Gly  
 50 55 60  
 Val Arg Trp Cys Asp Leu Gly Ser Ala Gln Pro Leu Pro Pro Gly Phe  
 65 70 75 80  
 Lys Leu Val Ser Cys Leu Gly Leu Pro Ser Ser Trp Asp Tyr Arg His  
 85 90 95  
 Ala Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe  
 100 105 110  
 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr  
 115 120

<210> 3478

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3478

Met Trp Trp Pro Leu Ala Gly Met Thr Asp Ser Glu Val Ile Thr His  
 1 5 10 15  
 Ser His Cys Asn Cys His Ser Val Ala Ser Phe Ser Gln Gly Gln Gly  
 20 25 30  
 Pro Gly Glu Arg Thr Gly Trp Gln Pro Ala Ala Gln Leu Glu Met Arg  
 35 40 45  
 Ser Leu Ser Phe Ser Ser Tyr Leu Met Glu Ala Ser Gln Met Gln Asp  
 50 55 60  
 Gly Ser Ser Arg Pro Ser Ile Thr Ser Ser Gln Cys Pro Lys Ala Arg  
 65 70 75 80  
 Arg Glu Ala Val Val Phe Lys Ser Arg Lys Thr Phe Leu Asn Leu Ala  
 85 90 95

Arg Ile Ala Ser Gln Thr Leu Ser

100

<210> 3479

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3479

Met Glu Ala Gln Ser Cys Glu Gln Glu Thr Thr Ala Arg Arg Asn Gly

1

5

10

15

Gly Ala Arg Ser Leu Lys Gly Asn Ala Ala Gly Gly Val Val Lys Asp

20

25

30

Asn Ile Cys Phe Gly Ala Thr Ser Gly Ala Val Thr Lys Lys Pro Ser

35

40

45

Thr Leu Arg Lys Lys Glu Lys Phe Gly Tyr Arg Glu Thr Pro Cys Ser

50

55

60

Lys Cys Cys Asp Ser Lys Thr Ala Gly Phe Ala Pro Leu Ala Lys Glu

65

70

75

80

Pro Thr Glu Thr Pro Gly Ala Ala Thr Ala Lys Pro Ala Leu Glu Gly

85

90

95

Leu Gly Trp Arg Lys Pro Arg Thr Glu Thr Arg Lys Leu Cys Thr Ala

100

105

110

Arg Leu Ala Val Asp Thr Asn Arg Lys Val Ser Arg Leu Leu Ser Gly

115

120

125

Arg Lys Arg Gly Ser Lys Pro Ala Thr Gln Trp Arg Glu Pro Arg Ser

130

135

140

His

145

<210> 3480

<211> 240

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3480

Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly  
 1 5 10 15  
 Ile Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val  
 20 25 30  
 Pro Gly Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr  
 35 40 45  
 Ile Phe Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser  
 50 55 60  
 His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val  
 65 70 75 80  
 His Gln Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser  
 85 90 95  
 Gly Ser Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val  
 100 105 110  
 Val Leu Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln  
 115 120 125  
 Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr  
 130 135 140  
 Leu Val Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg  
 145 150 155 160  
 Leu Ala Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val  
 165 170 175  
 Arg Arg Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu  
 180 185 190  
 Gly Asn Val Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly  
 195 200 205  
 Arg Ala Ser Trp Leu Tyr Lys Glu Ser Gln Phe Gly Thr Pro Arg Gly  
 210 215 220  
 Thr Val Trp Pro His Leu Gln Val Ser Gln Gly Cys Trp Trp Pro Arg  
 225 230 235 240

&lt;210&gt; 3481

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3481

Met Leu Leu Thr Thr Leu Thr His Phe Phe Phe Phe Phe Phe Phe Leu  
 1 5 10 15  
 Arg Gln Ser Leu Thr Leu Ser Ala Trp Leu Glu Cys Ser Gly Thr Ile  
 20 25 30  
 Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala  
 35 40 45  
 Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys His His Ala Arg  
 50 55 60  
 Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Glu  
 65 70 75 80  
 Ala Gly Leu Glu Leu Leu Thr Ser Gly Asn Pro Pro Ala Ser Ala Ser  
 85 90 95  
 Gln Ser Ala Gly Ile Thr Ser Val Ser His Arg Ala Arg Pro Thr Val  
 100 105 110  
 Phe Lys Ser Val Glu Thr Ser Phe Pro Leu Met Pro Cys Ser Arg Ala  
 115 120 125  
 Asp Tyr Asn Ser His His Ala Trp Gln Pro Leu Gly Pro Arg Phe Arg  
 130 135 140  
 Thr Ser Leu Thr Arg Phe Thr Ser Pro Gly Ile Leu Arg Cys Phe Pro  
 145 150 155 160  
 Asn Ser Pro Ala

&lt;210&gt; 3482

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3482

Met Pro Val Cys Pro Cys Leu His Leu Phe Phe Ser Phe Phe Phe Phe  
 1 5 10 15

Cys Phe Leu Arg Trp Ser Phe Ala Leu Ser Pro Arg Leu Glu Cys Ser  
                   20                                  25                                  30  
 Gly Ala Ile Leu Ala Arg Cys Ser Leu His Leu Pro Gly Ser Ser Asp  
                   35                                  40                                  45  
 Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys Tyr  
                   50                                  55                                  60  
 His Thr Trp Leu Ile Leu Val Phe Leu Ile Glu Thr Gly Phe His His  
                   65                                  70                                  75                                  80  
 Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala  
                                   85                                  90                                  95  
 Leu Ala Ser Gln Ser Val Gly Ile Thr Gly Leu Ser His Pro Ala Arg  
                                   100                                  105                                  110  
 Pro Asn Ala Ser Ile Leu Phe Leu Asp Ala Phe His Ser Lys Trp  
                   115                                  120                                  125

<210> 3483

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3483

Met Ser His Val Ile Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His  
           1                                  5                                  10                                  15  
 Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met  
                   20                                  25                                  30  
 Lys Leu Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp  
                   35                                  40                                  45  
 Asp Thr Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln  
                   50                                  55                                  60  
 Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro  
                   65                                  70                                  75                                  80  
 Gly Tyr Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val  
                                   85                                  90                                  95  
 Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr  
                   100                                  105                                  110

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Ile Ile Asn Ser Gly Phe Gln Asn Thr Ile Leu Cys Leu Cys Gly Phe
      115                120                125
Arg Ile His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu
      130                135                140
Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Leu Gln Cys
145                150                155                160
Ile Phe Gln Asp Cys
      165

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<210> 3484

<211> 405

<212> PRT

<213> Homo sapiens

<400> 3484

```

Met Ser Ser Ser Val Lys Thr Pro Ala Leu Glu Glu Leu Val Pro Gly
  1                5                10                15
Ser Glu Glu Lys Pro Lys Gly Arg Ser Pro Leu Ser Trp Gly Ser Leu
      20                25                30
Phe Gly His Arg Ser Glu Lys Ile Val Phe Ala Lys Ser Asp Gly Gly
      35                40                45
Thr Asp Glu Asn Val Leu Thr Val Thr Ile Thr Glu Thr Thr Val Ile
      50                55                60
Glu Ser Asp Leu Gly Val Trp Ser Ser Arg Ala Leu Leu Tyr Leu Thr
      65                70                75                80
Leu Trp Phe Phe Phe Ser Phe Cys Thr Leu Phe Leu Asn Lys Tyr Ile
      85                90                95
Leu Ser Leu Leu Gly Gly Glu Pro Ser Met Leu Gly Ala Val Gln Met
      100                105                110
Leu Ser Thr Thr Val Ile Gly Cys Val Lys Thr Leu Val Pro Cys Cys
      115                120                125
Leu Tyr Gln His Lys Ala Arg Leu Ser Tyr Pro Pro Asn Phe Leu Met
      130                135                140
Thr Met Leu Phe Val Gly Leu Met Arg Phe Ala Thr Val Val Leu Gly
145                150                155                160

```

Leu Val Ser Leu Lys Asn Val Ala Val Ser Phe Ala Glu Thr Val Lys  
 165 170 175  
 Ser Ser Ala Pro Ile Phe Thr Val Ile Met Ser Arg Met Ile Leu Gly  
 180 185 190  
 Glu Tyr Thr Gly Leu Leu Val Asn Leu Ser Leu Ile Pro Val Met Gly  
 195 200 205  
 Gly Leu Ala Leu Cys Thr Ala Thr Glu Ile Ser Phe Asn Val Leu Gly  
 210 215 220  
 Phe Ser Ala Ala Leu Ser Thr Asn Ile Met Asp Cys Leu Gln Asn Val  
 225 230 235 240  
 Phe Ser Lys Lys Leu Leu Ser Gly Asp Lys Tyr Arg Phe Ser Ala Pro  
 245 250 255  
 Glu Leu Gln Phe Tyr Thr Ser Ala Ala Ala Val Ala Met Leu Val Pro  
 260 265 270  
 Ala Arg Val Phe Phe Thr Asp Val Pro Val Ile Gly Arg Ser Gly Lys  
 275 280 285  
 Ser Phe Ser Tyr Asn Gln Asp Val Val Leu Leu Leu Leu Thr Asp Gly  
 290 295 300  
 Val Leu Phe His Leu Gln Ser Ile Thr Ala Tyr Ala Leu Met Gly Lys  
 305 310 315 320  
 Ile Ser Pro Val Thr Phe Ser Val Ala Ser Thr Val Lys His Ala Leu  
 325 330 335  
 Ser Ile Trp Leu Ser Val Ile Val Phe Gly Asn Lys Ile Thr Ser Leu  
 340 345 350  
 Ser Ala Val Gly Thr Ala Leu Val Thr Val Gly Val Leu Leu Tyr Asn  
 355 360 365  
 Lys Ala Arg Gln His Gln Gln Glu Ala Leu Gln Ser Leu Ala Ala Ala  
 370 375 380  
 Thr Gly Arg Ala Pro Asp Asp Thr Val Glu Pro Leu Leu Pro Arg Asp  
 385 390 395 400  
 Pro Arg Gln His Pro  
 405

<210> 3485

<211> 126

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3485

```

Met Lys Ser Val Ala Gln Leu Val Tyr Phe Phe Gly Leu Leu Leu Leu
 1             5             10             15
Asn Phe Val Ser Pro Lys Ser Glu Tyr Glu Ser Phe Cys Val Leu Ser
      20             25             30
Leu Leu Leu Phe Phe Arg Glu Val Lys Val Val Gly Val Gln Pro Ile
      35             40             45
Phe Val Tyr Phe Phe Cys Ser Ser Tyr Ile Tyr Tyr Tyr Trp Trp Phe
      50             55             60
Leu Ser Gly Asn Phe Ser Phe Thr Leu Thr Leu Ala Leu Pro Pro Ser
      65             70             75             80
Ala Phe Phe Ser Trp Leu Gln Leu Ser Thr Ile Ile Cys Gly Phe Pro
      85             90             95
Glu Gly Glu Pro Trp Trp Ser Gly Gly Gly Gly Arg Pro His Ser Lys
      100            105            110
Ser Gly Val Val Gly Val Pro Asp Arg Val Leu Ile Gln Glu
      115            120            125

```

&lt;210&gt; 3486

&lt;211&gt; 329

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3486

```

Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser
 1             5             10             15
Val Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Glu Leu Phe Pro
      20             25             30
Val Leu Phe Pro Met Leu Phe Pro Ala Leu Leu Pro Ala Leu Phe His
      35             40             45
Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser
      50             55             60

```



Ala Pro Phe Pro Met Arg Ser Leu His Cys Ser Pro Arg Cys Ser Pro  
 65 70 75 80  
 Cys Cys Ser Pro Arg Cys Ser Pro Cys Cys Ser Leu His Cys Ser Pro  
 85 90 95  
 Cys Cys Ser Leu Gln Cys Ser Leu His Cys Ser Pro His Cys Ser Leu  
 100 105 110  
 His Cys Ser Pro Cys Cys Phe Leu His Tyr Ser Pro Cys Cys Ser Leu  
 115 120 125  
 His Phe Ser Leu Cys Arg Ser Pro Cys Ile Pro Cys Thr Val Pro Cys  
 130 135 140  
 Thr Val Pro His Ala Val Pro Cys Asn Ala Pro Cys Thr Val Pro Arg  
 145 150 155 160  
 Thr Ala Pro Cys Thr Ile Pro His Ala Val Pro Cys Thr Phe Leu Cys  
 165 170 175  
 Ala Val Pro His Ala Phe Pro Ala Leu Phe Pro Ala Leu Phe Pro Met  
 180 185 190  
 Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Pro Phe Pro Met  
 195 200 205  
 Leu Phe Pro Ala Gly Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala  
 210 215 220  
 Pro Phe Pro Met Leu Phe Pro Ala Gly Phe Pro Ala Leu Phe Pro Met  
 225 230 235 240  
 Leu Phe Pro Ala His Phe Met Pro Gln Thr Phe Pro Phe Ser His Gln  
 245 250 255  
 His Thr Gly Ser Ser Phe Lys Ser Phe Cys Ser Val Ser Asn His Ser  
 260 265 270  
 Ser Ala Gly Thr Gly Trp Gly Gln Asp Gly Val Arg Pro Cys Arg Pro  
 275 280 285  
 Trp Pro Ser Arg Ser Val Pro Leu Arg Arg Leu Pro Gln Arg His Gly  
 290 295 300  
 Arg Leu Leu Lys Ala Thr Glu Arg Ser Thr Cys Trp Thr Pro Thr Thr  
 305 310 315 320  
 Arg Ala Thr Pro Ser Cys Gly Cys Pro

&lt;210&gt; 3487

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3487

```

Met Ile Glu Ile Leu Asn Lys Ser Lys Asn Cys Glu Gly Phe Ser Glu
  1             5             10             15
Arg Arg Thr Gly Arg Gly Ile Trp Thr Trp Val Cys Met His Arg Pro
          20             25             30
Gly Cys Ser Arg Val Ala Asp Gln Gln His Leu Glu Asp Phe Thr Glu
          35             40             45
Cys Phe Cys His Leu His Pro Ser Trp Pro Arg Pro Ala Leu Phe Pro
          50             55             60
Leu Leu Leu Gln Leu Ile Phe Pro Asp Leu Val Glu Gly Leu Val Leu
          65             70             75             80
Val Asn Ile Asp Pro Asn Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr
          85             90             95
Lys Leu Ser Gly Leu Thr Ser Thr Leu Pro Asp Thr Val Leu Ser His
          100            105            110
Leu Phe Ser Gln Glu Glu Leu Val Asn Asn Thr Glu Leu Val Gln Ser
          115            120            125
Tyr Arg Gln Gln Ile Gly Asn Val Val Asn Gln Ala Asn Leu Gln Leu
          130            135            140
Phe Trp Asn Met Tyr Asn Ser His Phe Pro Gly Ala Leu Trp Ala Gln
          145            150            155            160
Leu Val Leu

```

&lt;210&gt; 3488

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3488

Met Asn Gly Arg Leu Ser Lys Glu Asp Val Tyr Ala Ala Ser Lys His  
 1 5 10 15  
 Glu Lys Ser Ser Ser Ser Leu Phe Ile Arg Glu Met Gln Ile Lys Thr  
 20 25 30  
 Ala Met Arg Tyr His Leu Met Pro Val Arg Met Val Val Ile Lys Lys  
 35 40 45  
 Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu  
 50 55 60  
 Leu His Cys Trp Trp Glu Gly Lys Leu Val Gln Pro Leu Trp Lys Thr  
 65 70 75 80  
 Val Trp Gln Phe Thr Lys Asp Leu Val Leu Glu Ile Pro Phe Asp Pro  
 85 90 95  
 Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys  
 100 105

&lt;210&gt; 3489

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3489

Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser  
 1 5 10 15  
 Ile Tyr Pro Leu Ile Gly Cys Phe Tyr Phe Phe Leu Ala Ile Met Asn  
 20 25 30  
 Asn Ile Ala Val Asn Ile Cys Val Gln Gly Phe Ser Gly His Lys Phe  
 35 40 45  
 Leu Phe Phe Leu Gly Ile Tyr Leu Gly Val Glu Leu Leu Gly His Ile  
 50 55 60  
 Val Ile Leu Phe Asn Phe Leu Lys Asn Phe Pro Thr Val Leu His Gly  
 65 70 75 80  
 Gly Cys Ala Ile Val Tyr Ser Tyr Gln Gln Cys Met Lys Leu Gln Ile  
 85 90 95

Ser Pro His Pro Glu Asn Pro Phe Ile Ile Phe Cys Phe Ser Phe  
 100 105 110

<210> 3490

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3490

Met Val Ser Arg Pro Pro Arg Thr Pro Leu Ser Pro Ser Ser Trp Thr  
 1 5 10 15  
 Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser Arg Thr Glu Asn  
 20 25 30  
 Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys Ile Val Gln Asp Gly  
 35 40 45  
 Asp His Cys Ala Ala Cys Arg Ala Tyr Ala Thr Ser Ser Pro Gly Gln  
 50 55 60  
 Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr Leu Cys Gln Asn  
 65 70 75 80  
 Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu Glu Glu Cys Gln  
 85 90 95  
 His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala Gly Ala Gly Thr  
 100 105 110  
 Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly Ser Leu Val Ile  
 115 120 125  
 Val Ile Val Cys Ser Thr Val Gly Leu Ile Ile Cys Val Lys Arg Arg  
 130 135 140  
 Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser Val Gln Arg Lys  
 145 150 155 160  
 Arg Gln Glu Ala Glu Gly Glu Ala Thr Val Ile Glu Ala Leu Gln Ala  
 165 170 175  
 Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr Ile Pro Ser Phe  
 180 185 190  
 Thr Gly Arg Ser Pro Asn His  
 195

&lt;210&gt; 3491

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3491

```

Met Arg Lys Glu Lys Gln Ser Lys Ser Leu Leu Tyr Leu Leu Lys Ile
  1             5             10             15
Ser Ser Leu Phe Ser Ser Thr Leu Phe His Gln His Leu Pro Ala Gln
          20             25             30
Asn Phe His Asn Asp Pro Ile Leu Lys Pro Asn Ser Val Ser Arg Leu
          35             40             45
Leu Thr Ser Thr Ile Ala Arg Thr His Glu Asn Leu Leu Ile Gln Ala
          50             55             60
His Ala Met Ala Gln Ala His Ala Glu Gln Ala Pro Leu Thr Pro Leu
          65             70             75             80
Leu Leu Pro Ser Ala Ser Thr Ala Leu Leu Asn Arg His Val Asn Thr
          85             90             95
Gly Pro Phe Met His Arg Ser Lys Gly Ser Leu Arg Pro Lys Ala Leu
          100            105            110
Cys Thr Thr Leu Cys Asp Ser Leu
          115            120

```

&lt;210&gt; 3492

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3492

```

Met Val Ser Ala Ala Leu Ile Ser Gln Ser Leu Pro Arg Ser Pro His
  1             5             10             15
Ser Arg Ser Pro Pro Leu Ala Arg Ser Arg Arg Leu Pro Thr Pro Arg
          20             25             30

```

Ser Arg Pro Leu Arg Pro Ser Phe Leu Pro His Pro Ser Pro Arg Pro  
           35                          40                          45  
 Arg Asn Trp Pro Gly Pro Ser Lys Cys Arg Pro Arg Ser Arg Leu Gln  
           50                          55                          60  
 Asn Phe Leu Lys Leu Ser Asn Ser Lys His Pro Trp Pro Ala Ser Ser  
           65                          70                          75                          80  
 Lys Leu Pro Leu Leu Pro Ser Arg Leu Leu His Arg Leu Trp Arg Ser  
                           85                          90                          95  
 Arg Arg Arg Arg Arg Pro Gly Ser Arg Cys Arg  
                           100                          105

<210> 3493

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3493

Met His Leu Leu Leu Leu Ser Ser Ser Tyr Leu Asn Leu Leu Gln Arg  
   1                          5                          10                          15  
 Met Leu Trp Arg Leu Pro Trp Leu Ser His Val Ile His Lys Glu His  
                           20                          25                          30  
 Ala Thr Thr Ile Gln Phe Leu Gln Pro Arg Gly Arg Glu Gln Gln Tyr  
                           35                          40                          45  
 Leu Cys Arg Arg Arg His Ser Glu Leu Pro Ser Ala Ser Arg Asn Gln  
           50                          55                          60  
 Ile Ser Glu Arg Arg Leu Ser Ala Tyr Leu Arg Thr Ile Ser Gly Val  
           65                          70                          75                          80  
 Thr Val Cys Ser Asp Gly Leu Ser Thr Ser Val Trp Ser Cys Leu Leu  
                           85                          90                          95  
 Phe Arg Arg Asp Leu Asp Pro Ala Trp Met Met Glu Gly Lys Gly Leu  
                           100                          105                          110  
 Ala Gln Gly Glu Gly  
                           115

&lt;210&gt; 3494

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3494

```

Met Cys Val Cys Cys Phe Ile Phe Leu Met Leu Cys Leu Gly Arg Glu
  1             5             10             15
Cys Ser Tyr Ile Tyr Val Tyr Ile Leu Tyr Ser Pro Ile Trp Glu Ser
             20             25             30
Arg Ser Glu Val Ile Ala Ser Ser Asp Cys Phe Ser Ser Glu Val Gly
             35             40             45
Tyr His Trp Phe Thr Cys Leu Tyr Leu Asn Val Leu Pro Ser Val Glu
             50             55             60
Ser Pro Ala Cys Gly Glu Glu Ser Leu Leu Val Met Phe Leu Phe Ser
             65             70             75             80
Val Phe Met Gly Glu Phe Ile Gln Met Phe Tyr Leu Phe Gln Ser Thr
             85             90             95
Leu Asp Cys Ala Glu Met Ser Ser Ser Val Ala Gln Glu Lys Ala
             100            105            110

```

&lt;210&gt; 3495

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3495

```

Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr
  1             5             10             15
Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys
             20             25             30
Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly
             35             40             45
Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser
             50             55             60

```

Arg Tyr Cys Pro Arg Ala Pro Thr Leu Ser Cys His Pro His Ser Leu  
 65 70 75 80  
 His Thr Trp Gln Glu Gly Asp Ala Lys Pro Cys Val Leu Thr Gln Ala  
 85 90 95  
 Arg Ser Cys Leu Leu Leu Gly Gly Glu Gly Cys Asp Arg Ala Ala Cys  
 100 105 110  
 Pro Gly Pro Gly Ala Arg Gly Arg Arg Ser Cys Arg Trp Pro Gly Gly  
 115 120 125  
 Met Glu Asn Met Pro Gln Glu Arg Ala Phe Asp Leu Ser Leu Ser Leu  
 130 135 140  
 Ala Cys Gln Trp Gly Lys Gln Arg Gly Val Gln Val Glu Gly Pro Lys  
 145 150 155 160  
 Asp Lys Ala Val Leu Gly Lys Pro  
 165

<210> 3496

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3496

Met Asp Ser Ser Tyr Leu Asp Asn Gln Gly Ile Ala Pro Ser Lys Lys  
 1 5 10 15  
 Pro Met Pro Ser Tyr Lys Cys Gln Ser His Trp Ala Asn Gln Gln Thr  
 20 25 30  
 Leu Ser Gln Arg Ala Pro Leu Gly Phe Thr Gly Gln Trp Thr Asn Gln  
 35 40 45  
 Arg Arg Phe Gln Ser Ala Ser His Cys Gly Thr Ala Arg His Ser Leu  
 50 55 60  
 Cys Pro Ala Arg Ser Gly Thr Phe Leu Asp Pro Val Ser Ser Ile Ile  
 65 70 75 80  
 Leu Asp Cys Gln Leu Pro Glu Val Arg Lys Leu Ile Phe Tyr Phe Phe  
 85 90 95  
 Ser Leu Arg Leu Leu Asn Leu Phe Gln Leu His Leu Ser Thr Glu Leu  
 100 105 110



Ser Ser Tyr Gln Val Leu Arg His Ile Asn Asp Ala Asn Leu Val Pro  
 115 120 125  
 Phe Leu Val Trp Pro Asn Ser Lys Val Glu Glu Leu Gly Asn Lys Ser  
 130 135 140

<210> 3497

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3497

Met Lys Leu Ser Val Asn Glu Ala Gln Leu Gly Phe Tyr Leu Gly Ser  
 1 5 10 15  
 Leu Ser His Leu Ser Ala Cys Pro Gly Ile Asp Pro Arg Ser Ser Glu  
 20 25 30  
 Asp Gln Pro Glu Ser Leu Lys Thr Gly Gln Met Met Asp Glu Ser Asp  
 35 40 45  
 Glu Asp Phe Lys Glu Leu Cys Ala Ser Phe Phe Gln Arg Val Lys Lys  
 50 55 60  
 His Gly Ile Lys Glu Val Ser Gly Glu Arg Lys Thr Gln Lys Ala Ala  
 65 70 75 80  
 Ser Asn Gly Thr Gln Ile Arg Ser Lys Leu Lys Arg Thr Lys Gln Thr  
 85 90 95  
 Ala Thr Lys Thr Lys Thr Leu Gln Gly Pro Ala Glu Lys Lys Pro Pro  
 100 105 110  
 Ser Gly Ser Gln Ala Pro Arg Thr Lys Lys Gln Arg Val Thr Lys Trp  
 115 120 125  
 Gln Ala Ser Glu Pro Ala His Ser Val Asn Gly Glu Gly Gly Val Leu  
 130 135 140  
 Ala Ser Ala Pro Asp Pro Pro Val Leu Arg Glu Thr Ala Gln Asn Thr  
 145 150 155 160  
 Gln Thr Gly Asn Gln Gln Glu Pro Ser Pro Asn Leu Ser Arg Glu Lys  
 165 170 175  
 Thr Arg Glu Asn Val Pro Asn Ser Asp Ser Gln Pro Pro Pro Ser Cys  
 180 185 190

Leu Thr Thr Ala Val Pro Ser Pro Ser Lys Pro Arg Thr Ala Gln Leu  
 195 200 205  
 Val Leu Gln Arg Met Gln Gln Phe Lys Arg Ala Asp Pro Glu Arg Leu  
 210 215 220  
 Arg His Ala Ser Glu Glu Cys Ser Leu Glu Ala Ala Arg Glu Glu Asn  
 225 230 235 240  
 Val Pro Lys Asp Pro Gln Glu Glu Met Met Ala Gly Asn Val Tyr Gly  
 245 250 255  
 Leu Gly Pro Pro Ala Pro Glu Ser Asp Ala Ala Val Ala Leu Thr Leu  
 260 265 270  
 Gln Gln Glu Phe Ala Arg Val Gly Ala Ser Ala His Asp Asp Ser Leu  
 275 280 285  
 Glu Glu Lys Gly Leu Phe Phe Cys Gln Ile Cys Gln Lys Asn Leu Ser  
 290 295 300  
 Ala Met Asn Val Thr Arg Arg Glu Gln His Val Asn Arg Trp Gly Gln  
 305 310 315 320  
 Leu Gly Pro Ser Pro Leu Pro Cys Met  
 325

<210> 3498

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3498

Met Arg Gly Gly Gly Ser Ser Gly Glu Ile Gly Cys Phe Leu Leu Ser  
 1 5 10 15  
 Phe Ser Glu Lys Phe Leu Glu Arg Trp Ser Gln Arg Asp Ala Gly Gly  
 20 25 30  
 Trp Gly Ala Pro Gly Ser Lys Arg Leu Lys Glu Ser Glu Lys Thr Gln  
 35 40 45  
 Ala His Arg Asp Thr Ser Asn Leu Arg Ala Thr Ala Gln Ala Glu Pro  
 50 55 60  
 Lys Ala Thr Glu Thr Leu Thr Pro Glu Lys Lys His Arg Asp Arg Gly  
 65 70 75 80

Ser Arg Ser Ser Leu Cys His Cys Ser Ala Pro Glu Thr Pro Gln His  
                     85                    90                    95  
 Gly Glu Arg Ala Gly Gly Ser His Glu Lys Pro Arg Ala Leu Thr Gly  
                     100                    105                    110  
 Leu Leu Arg Gly Gly Arg Lys Ala Glu Thr Arg Pro Leu Glu Pro Pro  
                     115                    120                    125  
 Val Arg Thr Gly Pro Val Glu Trp Ala Gln Tyr Val Arg Thr Gln Arg  
                     130                    135                    140  
 Gly Arg Gln Ser Ile Gly Trp Gly Arg Leu Ser Leu Ile Phe Pro Arg  
 145                    150                    155                    160  
 Phe Ser Leu Leu Ser Gly Ser Val Val Leu Ser Pro Pro Ile Phe Thr  
                     165                    170                    175  
 Leu Val Ala

<210> 3499

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3499

Met Thr Arg Ala Arg Ile Gly Cys Phe Gly Pro Gly Gly Arg Ala Arg  
   1                    5                    10                    15  
 Gly Thr Glu Ser Ala Pro Glu Pro Ser Lys Arg Val Pro Pro Gly Arg  
                     20                    25                    30  
 Ser Trp Gln Thr Gln Glu Val Arg Gln Thr Arg Gly Ala Asn Gly Leu  
                     35                    40                    45  
 Gly Pro Arg Ala Gly Ser Ala Gly Ala Lys Ala Pro Gly Pro Ala Gln  
                     50                    55                    60  
 Gly Ala Ala Gln His Gly Leu Gly Gly Ser Ala Gly Leu Arg Val Arg  
 65                    70                    75                    80  
 Val Ser Pro Leu Ala Met Gly Ser Ala Ala Leu Glu Ile Leu Gly Leu  
                     85                    90                    95  
 Val Leu Cys Leu Val Gly Trp Gly Gly Leu Ile Leu Ala Cys Gly Leu  
                     100                    105                    110

Pro Met Trp Gln Val Thr Ala Phe Leu Asp His Asn Ile Val Thr Ala  
           115                    120                    125  
 Gln Thr Thr Trp Lys Gly Leu Trp Met Ser Cys Val Val Gln Ser Thr  
           130                    135                    140  
 Gly His Met Gln Cys Lys Val Tyr Asp Ser Val Leu Ala Leu Ser Thr  
   145                    150                    155                    160  
 Glu Val Gln Ala Ala Arg Ala Leu Thr Val Ser Ala Val Leu Leu Ala  
                     165                    170                    175  
 Phe Val Ala Leu Phe Val Thr Leu Ala Gly Ala Gln Cys Thr Thr Cys  
                     180                    185                    190  
 Val Ala Pro Gly Pro Ala Lys Ala Arg Val Ala Leu Thr Gly Gly Val  
           195                    200                    205  
 Leu Tyr Leu Phe Cys Gly Leu Leu Ala Leu Val Pro Leu Cys Trp Phe  
           210                    215                    220  
 Ala Asn Ile Val Val Arg Glu Phe Tyr Asp Pro Ser Val Pro Val Ser  
   225                    230                    235                    240  
 Gln Lys Tyr Glu Leu Gly Ala Ala Leu Tyr Ile Gly Trp Ala Ala Thr  
                     245                    250                    255  
 Ala Leu Leu Met Val Gly Gly Cys Leu Leu Cys Cys Gly Ala Trp Val  
                     260                    265                    270  
 Cys Thr Gly Arg Pro Asp Leu Ser Phe Pro Val Lys Tyr Ser Ala Pro  
           275                    280                    285  
 Arg Arg Pro Thr Ala Thr Gly Asp Tyr Asp Lys Lys Asn Tyr Val  
           290                    295                    300

<210> 3500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3500

Met Arg Asn Leu Gln Ser Ser Ile Gln Asn Trp Arg Arg His Thr Gln  
   1                    5                    10                    15  
 Thr Thr Leu Gln Gly Arg Leu Ala Ala Glu Ala Gly Pro Met Lys Lys  
           20                    25                    30

Met Met Lys Lys Thr Met Arg Met Tyr His Val Tyr Tyr Trp Pro Gln  
           35                          40                          45  
 Thr Thr Ser Pro Leu Pro Arg Val Ala His Arg Lys Gln Pro Ala Pro  
           50                          55                          60  
 Phe Phe Phe Leu Phe Ser Pro Thr Thr His His Pro Ser Leu Gln Thr  
           65                          70                          75                          80  
 Leu Pro Pro Thr Arg Leu Gly Cys Arg Val Cys Glu Ala Ala Gln Lys  
                           85                          90                          95  
 Val Cys Lys Ser Pro Leu Cys Leu Ile Cys Val Phe Pro Arg Lys Arg  
                   100                          105                          110  
 Ala Gly Ser Leu  
                   115

<210> 3501

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3501

Met Phe His His Gln Gln Ala Tyr Cys Leu Ala Pro Phe Asp Leu Ile  
   1                          5                          10                          15  
 Lys Val Arg Leu Gln Asn Gln Thr Glu Pro Arg Ala Gln Pro Gly Ser  
                   20                          25                          30  
 Pro Pro Pro Arg Tyr Gln Gly Pro Val His Cys Ala Ala Ser Ile Phe  
                   35                          40                          45  
 Arg Glu Glu Gly Pro Arg Gly Leu Phe Arg Gly Ala Trp Ala Leu Thr  
           50                          55                          60  
 Leu Arg Asp Thr Pro Thr Val Gly Ile Tyr Phe Ile Thr Tyr Glu Gly  
           65                          70                          75                          80  
 Leu Cys Arg Gln Tyr Thr Pro Glu Gly Gln Asn Pro Ser Ser Ala Thr  
                   85                          90                          95  
 Val Leu Trp Gln Gly Ala Leu Gln Ala Leu Leu Pro Gly Trp Gln Pro  
                   100                          105                          110  
 Arg Pro

&lt;210&gt; 3502

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3502

```

Met Ala Gly Thr Leu Asp Leu Asp Lys Gly Cys Thr Val Glu Glu Leu
  1             5             10             15
Leu Arg Gly Cys Ile Glu Ala Phe Asp Asp Ser Gly Lys Val Arg Asp
             20             25             30
Pro Gln Leu Val Arg Met Phe Leu Met Met His Pro Trp Tyr Ile Pro
             35             40             45
Ser Ser Gln Leu Ala Ala Lys Leu Leu His Ile Tyr Gln Gln Ser Arg
             50             55             60
Lys Asp Asn Ser Asn Ser Leu Gln Val Lys Thr Cys His Leu Val Arg
             65             70             75             80
Tyr Trp Ile Ser Ala Phe Pro Ala Glu Phe Asp Leu Asn Pro Glu Leu
             85             90             95
Ala Glu Gln Ile Lys Glu Leu Lys Ala Leu Leu Asp Gln Glu Gly Asn
             100            105            110
Arg Arg His Ser Ser Leu Ile Asp Ile Asp Ser Val Cys Val Gly Gly
             115            120            125
Ala Gln Arg Ala Gly Gly Ala Leu Ser Ile Leu Tyr His Leu Cys Leu
             130            135            140
Ile Asn Val Cys
145

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&lt;210&gt; 3503

&lt;211&gt; 599

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3503

Met Glu His Phe Leu Leu Glu Val Ala Ala Ala Pro Leu Arg Leu Ile  
 1 5 10 15  
 Ala Ala Lys Asn Glu Lys Ser Arg Ser Glu Leu Gly Arg Phe Leu Ala  
 20 25 30  
 Lys Gln Val Trp Thr Pro Gln Asp Arg Gln Cys Val Leu Ser Thr Leu  
 35 40 45  
 Ala Gln Leu Leu Leu Asp Lys Asp Cys Thr Val Leu Val Gly Arg Gln  
 50 55 60  
 Leu Arg Pro Leu Leu Leu Asp Leu Leu Glu Arg Asn Ala Glu Ala Ile  
 65 70 75 80  
 Lys Ala Gly Gly Gln Ile Asn His Asp Leu His Glu Arg Leu Cys Val  
 85 90 95  
 Ser Met Ser Lys Leu Ile Gly Asn His Pro Asp Val Leu Pro Phe Ala  
 100 105 110  
 Leu Arg Tyr Phe Lys Asp Thr Ser Pro Val Phe Gln Arg Leu Phe Leu  
 115 120 125  
 Glu Ser Ser Asp Ala Asn Pro Val Arg Tyr Gly Arg Arg Arg Met Lys  
 130 135 140  
 Leu Arg Asp Leu Met Glu Ala Ala Phe Lys Phe Leu Gln Gln Glu Gln  
 145 150 155 160  
 Ser Val Phe Arg Glu Leu Trp Asp Trp Ser Val Cys Val Pro Leu Leu  
 165 170 175  
 Arg Ser His Asp Thr Leu Val Arg Trp Tyr Thr Ala Asn Cys Leu Ala  
 180 185 190  
 Leu Val Thr Cys Met Asn Glu Glu His Lys Leu Ser Phe Leu Lys Lys  
 195 200 205  
 Ile Phe Asn Ser Asp Glu Leu Ile His Phe Arg Leu Arg Leu Leu Glu  
 210 215 220  
 Glu Ala Gln Leu Gln Asp Leu Glu Lys Ala Leu Val Leu Ala Asn Pro  
 225 230 235 240  
 Glu Val Ser Leu Trp Arg Lys Gln Lys Glu Leu Gln Tyr Leu Gln Gly  
 245 250 255  
 His Leu Val Ser Ser Asp Leu Ser Pro Arg Val Thr Ala Val Cys Gly  
 260 265 270  
 Val Val Leu Pro Gly Gln Leu Pro Ala Pro Gly Glu Leu Gly Gly Asn  
 275 280 285

Arg Ser Ser Ser Arg Glu Gln Glu Leu Ala Leu Arg Ser Tyr Val Leu  
 290 295 300  
 Val Glu Ser Val Cys Lys Ser Leu Gln Thr Leu Ala Met Ala Val Ala  
 305 310 315 320  
 Ser Gln Asn Ala Val Leu Leu Glu Gly Pro Ile Gly Cys Gly Lys Thr  
 325 330 335  
 Ser Leu Val Glu Tyr Leu Ala Ala Val Thr Gly Arg Thr Lys Pro Pro  
 340 345 350  
 Gln Leu Leu Lys Val Gln Leu Gly Asp Gln Thr Asp Ser Lys Met Leu  
 355 360 365  
 Leu Gly Met Tyr Arg Cys Thr Asp Val Pro Gly Glu Phe Val Trp Gln  
 370 375 380  
 Pro Gly Thr Leu Thr Gln Ala Ala Thr Met Gly His Trp Ile Leu Leu  
 385 390 395 400  
 Glu Asp Ile Asp Tyr Ala Pro Leu Asp Val Val Ser Val Leu Ile Pro  
 405 410 415  
 Leu Leu Glu Asn Gly Glu Leu Leu Ile Pro Gly Arg Gly Asp Cys Leu  
 420 425 430  
 Lys Val Ala Pro Gly Phe Gln Phe Phe Ala Thr Arg Arg Leu Leu Ser  
 435 440 445  
 Cys Gly Gly Asn Trp Tyr Arg Pro Leu Asn Ser His Ala Thr Leu Leu  
 450 455 460  
 Asp Lys Tyr Trp Thr Lys Ile His Leu Asp Asn Leu Asp Lys Arg Glu  
 465 470 475 480  
 Leu Asn Glu Val Leu Gln Ser Arg Tyr Pro Ser Leu Leu Ala Val Val  
 485 490 495  
 Asp His Leu Leu Asp Ile Tyr Ile Gln Leu Thr Gly Glu Lys His His  
 500 505 510  
 Ser Trp Ser Asp Ser Ser Val Gly Cys Glu Gln Ala Pro Glu Glu Val  
 515 520 525  
 Ser Glu Ala Arg Arg Glu Asn Lys Arg Pro Thr Leu Glu Gly Arg Glu  
 530 535 540  
 Leu Ser Leu Arg Tyr Trp Thr Lys Gln Phe Phe Leu Phe Phe Leu Ser  
 545 550 555 560  
 Phe Phe Phe Val Arg Gln Ile Pro Ala Leu Leu Pro Arg Leu Glu Cys  
 565 570 575



Ser Gly Ala Val Leu Ala His Ser Asn Leu Arg Leu Leu Gly Ser Lys

580

585

590

Phe Leu Pro Ala Arg Ser Lys

595

<210> 3504

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3504

Met Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu

1

5

10

15

Ser Leu Ala Ala Pro Asp Pro Gly Gln Arg Ser Ser Ser Gln Pro Ser

20

25

30

Pro Ala Ile Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His

35

40

45

Ala Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu

50

55

60

Ser Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg

65

70

75

80

Pro Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys

85

90

95

Lys Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gln

100

105

110

Glu Pro Cys Ser Val Trp Glu Pro Pro Lys Arg His Arg Asp Gly Ser

115

120

125

Ala Phe Gln Tyr Glu Tyr Glu Pro Pro Cys Thr Ser Leu Cys Ala Arg

130

135

140

Val Gln Ala Val Arg

145

<210> 3505

<211> 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3505

```

Met Ser His Thr Ser His Leu Thr Leu Lys Ile Cys Val Ile His Arg
  1             5             10             15
Pro Thr Leu Arg Tyr Leu Thr Leu Ile Ala Tyr Arg Gln His Val Arg
      20             25             30
Ala Pro Arg Gly Arg Cys Ser His Pro Asp Lys Lys Ser Ala Ala Leu
      35             40             45
Val Leu Arg Ile Leu Phe Pro Arg Thr Glu Ala Leu Pro Ser Thr Ile
      50             55             60
Ser Leu Ala Leu Ala Glu Ser Ser Ser Pro Ile Ala Ser Leu Ser Ser
      65             70             75             80
Thr Ser His Ala Ala Leu Arg Pro Gln Gly Asp Gly Gly Arg Gly Val
      85             90             95
Glu Thr Arg Met Glu Trp Asn Ile Phe Ile Lys
      100             105

```

&lt;210&gt; 3506

&lt;211&gt; 331

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3506

```

Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro
  1             5             10             15
Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly
      20             25             30
Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu
      35             40             45
Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe
      50             55             60
Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro
      65             70             75             80

```

Lys Gln Gly Lys Arg Leu Asn Phe Thr Gln Ser Tyr Ser Leu Gln Leu  
                     85                    90                    95  
 Ser Asn Leu Lys Met Glu Asp Thr Gly Ser Tyr Arg Ala Gln Ile Ser  
                     100                    105                    110  
 Thr Lys Thr Ser Ala Lys Leu Ser Ser Tyr Thr Leu Arg Ile Leu Arg  
                     115                    120                    125  
 Gln Leu Arg Asn Ile Gln Val Thr Asn His Ser Gln Leu Phe Gln Asn  
                     130                    135                    140  
 Met Thr Cys Glu Leu His Leu Thr Cys Ser Val Glu Asp Ala Asp Asp  
 145                    150                    155                    160  
 Asn Val Ser Phe Arg Trp Glu Ala Leu Gly Asn Thr Leu Ser Ser Gln  
                     165                    170                    175  
 Pro Asn Leu Thr Val Ser Trp Asp Pro Arg Ile Ser Ser Glu Gln Asp  
                     180                    185                    190  
 Tyr Thr Cys Ile Ala Glu Asn Ala Val Ser Asn Leu Ser Phe Ser Val  
                     195                    200                    205  
 Ser Ala Gln Lys Leu Cys Glu Asp Val Lys Ile Gln Tyr Thr Asp Thr  
                     210                    215                    220  
 Lys Met Ile Leu Phe Met Val Ser Gly Ile Cys Ile Val Phe Gly Phe  
 225                    230                    235                    240  
 Ile Ile Leu Leu Leu Leu Val Leu Arg Lys Arg Arg Asp Ser Leu Ser  
                     245                    250                    255  
 Leu Ser Thr Gln Arg Thr Gln Gly Pro Glu Ser Ala Arg Asn Leu Glu  
                     260                    265                    270  
 Tyr Val Ser Val Ser Pro Thr Asn Asn Thr Val Tyr Ala Ser Val Thr  
                     275                    280                    285  
 His Ser Asn Arg Glu Thr Glu Ile Trp Thr Pro Arg Glu Asn Asp Thr  
                     290                    295                    300  
 Ile Thr Ile Tyr Ser Thr Ile Asn His Ser Lys Glu Ser Lys Pro Thr  
 305                    310                    315                    320  
 Phe Ser Arg Ala Thr Ala Leu Asp Asn Val Val  
                     325                    330

&lt;210&gt; 3507

&lt;211&gt; 160

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3507

```

Met Pro Ala Ile Ser Val Ser Pro Ser Leu Gln Lys Tyr Ser Lys Gln
  1             5             10            15
Gln Lys Leu Asn Thr Tyr Glu Val Asn Thr Lys Asp Leu His Arg Lys
      20             25            30
Ile Ser Gly Ser Ser Val Asp Ala Ile Ala His Cys Ser Ala Gly Gln
      35             40            45
Ser Ser Gly Leu Ser Phe Asp Phe Gly Pro Val Leu Gln Asn Gln Gln
      50             55            60
Pro Phe Ser Gln Lys Thr Val Glu Cys Ser Gln Asp His Leu Trp Lys
      65             70            75            80
Val Asn Tyr Ser Ile Phe Asn Leu Leu Pro Trp Ala Met Met Ser Glu
      85             90            95
Thr Gln His Gly Gly Arg Thr Ser Ser Cys Val Gly Asn Leu Ser Glu
      100            105            110
Pro Pro Trp Arg Pro Pro Lys Trp Leu Trp Gln Ser Cys Arg Gly Gly
      115            120            125
Gly Asn Lys Lys Gly Asp Thr Trp Leu Ser Phe Leu Asn Gln Leu Thr
      130            135            140
Met Gly Thr His Leu Tyr Trp Asn Phe Arg Val Arg Lys Tyr Gln Asn
      145            150            155            160

```

&lt;210&gt; 3508

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3508

```

Met Lys Ser Cys Ser Leu Ala Gly Ala Gly Val Gln Trp His Asp Phe
  1             5             10            15
Gly Ser Leu Gln Pro Pro Pro Pro Ser Phe Arg Arg Phe Ser Cys Leu
      20             25            30

```

&lt;211&gt; 145

<213> Homo sapiens

Met	Ala	Lys	Glu	Ile	Lys	Ser	Asn	Arg	Gln	Glu	Arg	Gly	Ala	Thr	Gly
1					5				10					15	
Leu	Val	Asn	Ser	Gln	Thr	Glu	Leu	Val	Ile	Gly	Gln	Trp	Lys	Val	Asp
				20				25					30		
Cys	Ser	Thr	Phe	Pro	Phe	Leu	Lys	Val	Val	Cys	Tyr	Lys	Glu	Pro	Pro
			35				40					45			
Leu	His	Val	Arg	Ala	Ala	Leu	Asp	Ser	Leu	Ser	Phe	Ile	His	Met	Ser
	50					55				60					
Glu	Gly	Leu	Cys	Ser	Arg	Ala	Met	Arg	Glu	Glu	Phe	Ala	Thr	Leu	Arg
65					70				75					80	

[illegible]

<210> 3510  
<211> 606  
<212> PRT  
<213> Homo sapiens

<400> 3510

Met	Phe	Gly	Asn	Glu	Cys	Cys	Phe	Ser	Thr	Gly	Glu	Val	Ile	Lys	Ile
1					5				10					15	
Thr	Gly	Leu	Lys	Val	Lys	Lys	Ile	Ile	Ala	Glu	Ile	Cys	Glu	Gln	Ile
				20				25					30		
Glu	Gly	Cys	Glu	Phe	Leu	Gln	Pro	Phe	Glu	Leu	Pro	Met	Asn	Phe	Pro
				35			40					45			
Gly	Leu	Phe	Lys	Ile	Val	Ala	Asp	Lys	Thr	Pro	Tyr	Leu	Thr	Met	Glu
	50					55					60				
Glu	Ile	Thr	Arg	Thr	Ile	His	Ile	Gly	Pro	Ser	Arg	Leu	Gly	His	Pro
65					70					75					80
Cys	Phe	Tyr	His	Gln	Lys	Asp	Ile	Lys	Leu	Glu	Asn	Leu	Ile	Ile	Lys
				85					90				95		
Gln	Gly	Glu	Gln	Ile	Met	Leu	Asn	Ser	Val	Glu	Glu	Ile	Asp	Gly	Glu
			100				105					110			
Ile	Met	Val	Ser	Cys	Ala	Val	Ala	Arg	Asn	His	Gln	Thr	His	Ser	Phe
	115						120					125			
Asn	Leu	Pro	Leu	Ser	Gln	Glu	Gly	Glu	Phe	Tyr	Glu	Cys	Glu	Asp	Glu
130					135						140				

Arg Ile Tyr Thr Leu Lys Glu Ile Val Glu Trp Lys Ile Pro Lys Asn  
 145 150 155 160  
 Arg Thr Arg Thr Val Asn Leu Thr Asp Phe Ser Asn Lys Trp Asp Ser  
 165 170 175  
 Thr Asn Pro Phe Pro Lys Asp Phe Cys Gly Thr Leu Ile Leu Lys Pro  
 180 185 190  
 Val Tyr Glu Ile Gln Gly Val Met Lys Phe Arg Lys Asp Ile Ile Arg  
 195 200 205  
 Ile Leu Pro Ser Leu Asp Val Glu Val Lys Asp Ile Thr Asp Ser Tyr  
 210 215 220  
 Asp Ala Asn Trp Phe Leu Gln Leu Leu Ser Thr Glu Asp Leu Phe Glu  
 225 230 235 240  
 Met Thr Ser Lys Glu Phe Pro Ile Val Thr Glu Val Ile Glu Ala Pro  
 245 250 255  
 Glu Gly Asn His Leu Pro Gln Ser Ile Leu Gln Pro Gly Lys Thr Ile  
 260 265 270  
 Val Ile His Lys Lys Tyr Gln Ala Ser Arg Ile Leu Ala Ser Glu Ile  
 275 280 285  
 Arg Ser Asn Phe Pro Lys Arg His Phe Leu Ile Pro Thr Ser Tyr Lys  
 290 295 300  
 Gly Lys Phe Lys Arg Arg Pro Arg Glu Phe Pro Thr Ala Tyr Asp Leu  
 305 310 315 320  
 Glu Ile Ala Lys Ser Glu Lys Glu Pro Leu His Val Val Ala Thr Lys  
 325 330 335  
 Ala Phe His Ser Pro His Asp Lys Leu Ser Ser Val Ser Val Gly Asp  
 340 345 350  
 Gln Phe Leu Val His Gln Ser Glu Thr Thr Glu Val Leu Cys Glu Gly  
 355 360 365  
 Ile Lys Lys Val Val Asn Val Leu Ala Cys Glu Lys Ile Leu Lys Lys  
 370 375 380  
 Ser Tyr Glu Ala Ala Leu Leu Pro Leu Tyr Met Glu Gly Gly Phe Val  
 385 390 395 400  
 Glu Val Ile His Asp Lys Lys Gln Tyr Pro Ile Ser Glu Leu Cys Lys  
 405 410 415  
 Gln Phe Arg Leu Pro Phe Asn Val Lys Val Ser Val Arg Asp Leu Ser  
 420 425 430

Ile Glu Glu Asp Val Leu Ala Ala Thr Pro Gly Leu Gln Leu Lys Glu  
 435 440 445  
 Asp Ile Thr Asp Ser Tyr Leu Leu Ile Ser Asp Phe Ala Asn Pro Thr  
 450 455 460  
 Glu Cys Trp Glu Ile Pro Val Gly Arg Leu Asn Met Thr Val Gln Leu  
 465 470 475 480  
 Val Ser Asn Phe Ser Arg Asp Ala Glu Pro Phe Leu Val Arg Thr Leu  
 485 490 495  
 Val Glu Glu Ile Thr Glu Glu Gln Tyr Tyr Met Met Arg Arg Tyr Glu  
 500 505 510  
 Ser Ser Ala Ser His Pro Pro Pro Arg Pro Pro Lys His Pro Ser Val  
 515 520 525  
 Glu Glu Thr Lys Leu Thr Leu Leu Thr Leu Ala Glu Glu Arg Thr Val  
 530 535 540  
 Asp Leu Pro Lys Ser Pro Lys Arg His His Val Asp Ile Thr Lys Lys  
 545 550 555 560  
 Leu His Pro Asn Gln Ala Gly Leu Asp Ser Lys Val Leu Ile Gly Ser  
 565 570 575  
 Gln Asn Asp Leu Val Asp Glu Glu Lys Glu Arg Ser Asn Arg Gly Ala  
 580 585 590  
 Thr Ala Val Ala Glu Thr Phe Lys Asn Glu Lys His Gln Lys  
 595 600 605

<210> 3511

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3511

Met Glu Met Trp Glu Arg Gln Leu Phe Leu Thr Thr Gln Pro Ser Pro  
 1 5 10 15  
 Leu Pro Gly Gly Thr Pro Arg Asn Glu Ala Leu Pro Leu Arg Glu Phe  
 20 25 30  
 Pro Ala Thr Pro Ser Leu Gly Pro Gly Met Ala Ala Val Arg Ala Pro  
 35 40 45



Ala Pro Ser Gly Asp Ser Leu Gly Thr Asn Tyr His Arg Pro Trp Ala  
 50 55 60  
 Thr Ser Lys Ala Ala His Thr Asp Thr Pro Ser Leu Val Thr Ser Pro  
 65 70 75 80  
 Gln Glu Glu Gly His Pro Arg Lys Gly Gly Arg Leu Pro Gly Leu Glu  
 85 90 95  
 Pro Leu Gln Gly Leu Thr Arg His  
 100

<210> 3512

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3512

Met Glu Ala Gly Cys Lys Leu Lys Leu Lys Pro Pro Leu Tyr Phe Ser  
 1 5 10 15  
 Ser Thr Ile Gly Phe Glu Ser Pro Asp Gly Ser Ser Tyr Pro His Phe  
 20 25 30  
 Lys Pro Cys Leu Leu Thr Ile Ser Ser Cys Ser Leu Thr Gln Ser Pro  
 35 40 45  
 Ala Met Ala Ser Ser Leu Ser Ser Thr Val Lys Gly Arg Leu Phe Thr  
 50 55 60  
 Gln Ala His Lys Thr Leu Asp Tyr His Ser Pro Val Ile Leu Leu Ser  
 65 70 75 80  
 Tyr Cys Ser Leu Leu Tyr Leu Ser Pro Leu Lys Pro Pro Trp Pro Pro  
 85 90 95  
 Pro Ile Leu Val Ser Leu His  
 100

<210> 3513

<211> 244

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3513

Met Ser His Arg Ala Trp Pro Thr Ser Ala Leu Leu Asn Leu Ser Ser  
 1 5 10 15  
 Leu Ser Leu Thr Leu Pro Gln Trp Leu Leu Tyr Gln Pro Thr Lys Lys  
 20 25 30  
 Ala Pro Leu Pro Thr Leu Ala Gly Gln Arg Ala His Ser Leu Pro Ser  
 35 40 45  
 His Lys Pro Val Pro His Ala Trp Ala Leu Leu Arg Pro Lys Gln Pro  
 50 55 60  
 Ser Ser Asn Ser Glu Glu Asn Pro Glu Leu Leu Leu Thr Val Val  
 65 70 75 80  
 Ile His Pro Leu Asn Ala Tyr Cys Gly Ser Pro Glu Thr Ile Thr Trp  
 85 90 95  
 Leu Ala Ser Val Asn Ser His Asn Ser Phe Gln Cys Tyr His Ser Cys  
 100 105 110  
 Val Cys Pro Leu Leu Pro Trp Leu Ser Pro Arg Tyr Phe Leu Gln Asp  
 115 120 125  
 Ser Val Pro Ser Leu Val Ser Gly Phe Ser Arg Tyr Leu Pro Met Ala  
 130 135 140  
 Cys Leu Gly Pro Ala Ser Gly Asn Pro Ala Trp Ile Val Ala Arg Lys  
 145 150 155 160  
 Gly Cys Glu Asp Trp Met Pro Pro Phe Val Phe Val Phe Ser Phe Ile  
 165 170 175  
 Pro Ser Phe Leu Ser Ser Leu Pro Ser Phe Leu Pro Leu Ser Leu Ser  
 180 185 190  
 Leu Ser Phe Phe Leu Ser Leu Phe Leu Phe Leu Cys Leu Phe Phe Phe  
 195 200 205  
 Leu Phe Phe Arg Thr Cys His Pro Gly Trp Ser Ala Val Ala Gln Ser  
 210 215 220  
 Trp Leu Thr Thr Ile Ser Ala Ser Gln Ile Gln Ala Ile Leu Arg Pro  
 225 230 235 240  
 Gln Pro Pro Lys

&lt;210&gt; 3514

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3514

```

Met Arg Val Pro Val Leu Tyr Pro Phe Gln His Leu Val Leu Ser Val
 1             5             10             15
Lys Lys Ile Ile Leu Val Ser Met Gln Trp Tyr Leu Ile Lys Asp Thr
      20             25             30
Gln Met Ala Asn Lys Gln Met Lys Arg Cys Ser Ile Ser Leu Ala Thr
      35             40             45
Gly Glu Met Gln Ile Lys Thr Thr Val Arg Tyr His Phe Thr Pro Thr
      50             55             60
Arg Phe Thr Ile Ile Lys Arg Trp Lys Ile Thr Ser Val Asp Lys Asn
      65             70             75             80
Leu Glu Lys Met Glu Pro Ser Tyr Thr Ile Gly Gly Asn Val Gly Trp
      85             90             95
Cys Ser Cys Ser Glu Lys Gln Phe Leu Thr Leu Gly
      100             105

```

&lt;210&gt; 3515

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3515

```

Met Glu Ala Arg Pro Pro Pro Glu Arg Gly Ser Leu Lys Ile Ile Leu
 1             5             10             15
Thr Ser Leu Ser Ser Val Leu Thr Ser Leu Asp Cys Ile Leu Ser Phe
      20             25             30
His Leu Arg Ser Ser Trp Phe Trp Leu Ala Ser Ser Asp Ile Thr Pro
      35             40             45
Ala Glu Glu Arg Glu Gly Thr Arg Cys Ile Thr Ala Trp Ser Gln Gly

```

50	55	60	
Pro Arg Leu Ile Cys Leu His Ser Thr Phe Gln Ser Leu Met Phe Val			
65	70	75	80
Leu Cys Ile Leu Ser Arg Gly Phe Arg Ser Leu Ser Arg Lys Asn Arg			
	85	90	95
Glu Lys Tyr Val Tyr Ser Ser Leu Met Glu Val Glu Phe Ser			
100	105	110	

&lt;210&gt; 3516

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3516

Met Leu Leu Glu Gly Arg Asp Gly Thr Ser Ile His Leu Val Asn Asn			
1	5	10	15
Cys Gly Leu Ser Ser Val Ser Met Pro Ala Thr Val Leu Ser Ser Asp			
	20	25	30
His Thr Ala Val Asn Arg Ile Asp Glu Leu Ser Leu Ser Ser Trp Ser			
	35	40	45
Ser Gln Pro Ser Gly Glu Asp Arg Tyr Ile Gly Asn Lys Phe Leu Ile			
50	55	60	
Ala Ser Lys Gly Ala Ser Pro Lys Lys His Gln Val Thr Gly Tyr Arg			
65	70	75	80
Thr Met Trp Asp Gly Pro Gly Arg Val Cys Glu Phe Pro Val Ala Ala			
	85	90	95
Val Thr Asn Tyr His Lys Phe Ser Gly Leu Lys Leu Ile Lys Met Gly			
100	105	110	
Arg Val Gln Trp Leu Met Pro Val Ile Pro Ala Leu			
115	120		

&lt;210&gt; 3517

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3517

Met Pro Phe Ala Trp Pro Ala Pro Glu Trp Pro Gln Cys Gly Arg Ala  
 1 5 10 15  
 Ala Glu Ala Pro Arg His Gln Cys Asp Pro Val Ser Thr Ala Cys Ser  
 20 25 30  
 Leu Trp Thr Pro Phe Ser Ser His Gly Pro Pro Arg His Ser Ala Pro  
 35 40 45  
 Gly Pro Ser Ala Phe Pro Gln Leu Ala Leu Trp Lys Cys Gly Gln Gln  
 50 55 60  
 Cys Phe Gln Ser Pro Ser Ala Trp Val Cys Pro Val Phe Pro Cys Val  
 65 70 75 80  
 Asp Glu Gly Pro Ala Leu Leu Ala Gly Ala Ala Leu Asp Thr Pro Phe  
 85 90 95  
 Pro Arg His Ser Pro Gly Leu Ala His Met Gln Leu Arg Ser Arg Gly  
 100 105 110  
 Met Leu Thr Gln Arg Leu Val Gly Ala Ala Ser Thr Asp Phe Ser Leu  
 115 120 125  
 Glu Ser Ser Cys Leu Leu Phe Ile Val Ser Arg Cys Leu Arg Glu Ile  
 130 135 140  
 Pro  
 145

&lt;210&gt; 3518

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3518

Met Phe Lys Lys Asn Gly Ser Phe Arg Asn Asp Lys Leu Phe His Pro  
 1 5 10 15  
 Ile Thr Pro Asn Thr Cys Gly Ser Asp Ser Ser Leu His Leu Tyr Ile  
 20 25 30  
 Leu Tyr Leu His Trp Pro Asp His Pro Arg Thr Thr Tyr Leu Thr Ser

35 40 45  
 Ala Pro Phe Cys Leu Leu Thr Gln His Ser Leu Ser Leu Ser Phe Ser  
 50 55 60  
 Leu Pro Leu Pro Leu Phe Leu Pro Arg Pro Ser Val Thr His Thr His  
 65 70 75 80  
 Thr His Thr His Thr His Arg Leu His Asn Ala His Arg Asn Val Leu  
 85 90 95  
 Ile Pro Phe Val  
 100

<210> 3519

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3519

Met Gly Gly Arg Ser His Pro Gln Pro Ala Gly Thr Arg Trp Arg Leu  
 1 5 10 15  
 Lys Ser Leu Ser Thr Leu Thr Leu Val His Leu Thr Gly Thr Leu Thr  
 20 25 30  
 Ser Ile Ser Lys Thr Trp Ser Leu Arg Thr Pro Cys Leu Gln Arg Leu  
 35 40 45  
 Leu Ile Ser Ser Arg Val Leu Gly Ile Gln Gly Arg Gly Gln Pro Gly  
 50 55 60  
 Trp Thr Gly Ser Trp Glu Gly Val Ser Trp Gln Pro Pro Gly Gln Thr  
 65 70 75 80  
 Asp Leu Pro Ala Cys Gln Arg Gln Pro Val Leu Pro Ala Pro Thr Arg  
 85 90 95  
 Thr Ser Ser Gln Ala Arg Cys  
 100

<210> 3520

<211> 105

<212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3520

```

Met Arg Ile Leu Val Ile Pro His Leu Gln Gln His Leu Gly Tyr Phe
  1             5             10             15
Thr Trp Phe Ile Ile Cys Ile Ser Leu Met Thr Asn Glu Arg His Phe
             20             25             30
Val Ile Tyr Val Phe Asp Val Tyr Leu Ser Ser Ile Val Lys Cys Leu
             35             40             45
Phe Lys Ser Phe Asp His Ile Leu Ile Gly Gln Leu Phe Phe Leu Leu
             50             55             60
Leu Asn Tyr Ser Pro Leu Ser Ile Leu Asn Thr Ile Pro Ser Ser Asp
             65             70             75             80
Met Arg Ser Val Asn Ile Phe Ser Gln Ala Ala Ala Cys Leu Phe Ile
             85             90             95
Phe Leu Leu Val Tyr Phe Val Lys Phe
             100             105

```

&lt;210&gt; 3521

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3521

```

Met Ser Gly Ser Ser Arg Met Gly Thr Thr Thr Ser Arg Ser Gly Ser
  1             5             10             15
Glu Pro Pro Ala Val Arg Pro Ala Lys Ala Arg Val Arg Met Pro Ser
             20             25             30
Arg Ser Met Ala Pro Gly Ser Ala Pro Pro Arg Cys Gly Lys Gly Leu
             35             40             45
Gly Arg Ala Leu Arg Pro Leu Pro Arg Ser Pro Cys Ser Pro His Ser
             50             55             60
Gly Thr Ala Asn Ala Thr Gly Gln Pro Ala Val Pro Arg Lys Glu Ser
             65             70             75             80
Gln Gly Arg Glu Thr Pro Pro Arg Ala Ala Ser Val His Pro Ala Ala

```

	85		90		95										
Arg	Ala	Ser	Tyr	Leu	Cys	Leu	Ser	Lys	Gln	Ser	Ala	Pro	Trp	Glu	Leu
	100							105						110	
Lys	Tyr	Asn	Arg	Cys	Gln	Val	Gln	Gly	Arg	Arg	Phe	Ala	Ala	Glu	Asn
	115						120						125		

&lt;210&gt; 3522

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3522

Met	Tyr	Gln	Gly	Lys	Glu	Gly	Arg	Lys	Arg	Arg	Ser	Arg	Ser	Arg	Asp
1				5				10					15		
Ser	Gly	Glu	Leu	Gly	Leu	Ser	Pro	Ala	Ala	Val	Leu	Arg	Val	Ser	Leu
		20						25					30		
Asn	Cys	Pro	Trp	Ala	Ala	Ser	Leu	Glu	Val	Leu	Lys	Gly	Ser	Leu	Glu
		35					40					45			
Gly	Asn	Lys	Trp	Pro	Leu	Cys	Val	Glu	Ala	Leu	Val	Arg	Val	Tyr	Lys
	50					55					60				
Ser	Lys	Thr	Gln	Leu	Gly	Ala	Val	Ala	His	Ala	Cys	Asn	Pro	Ser	Arg
65				70					75					80	
Gly	Arg	Gln	Ile	Thr	Trp	Gly	Gln	Glu	Phe	Glu	Thr	Ser	Leu	Ala	Asn
			85					90					95		
Val	Val	Lys	Pro	Arg	Leu	Tyr									
			100												

&lt;210&gt; 3523

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3523

Met	Ala	Trp	Ile	Pro	Leu	Phe	Leu	Gly	Leu	Leu	Ala	Tyr	Cys	Thr	Gly
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----



1	5	10	15
Ser Val Ala Ser Tyr Asp Leu Ile Gln Thr Pro Ser Leu Ser Val Ser			
20	25	30	
Pro Gly Leu Thr Ala Thr Ile Thr Cys Ser Gly Asp Arg Leu Gly Ser			
35	40	45	
Arg Phe Val Ser Trp Tyr Gln Gln Arg Ser Gly Gln Ser Pro Val Val			
50	55	60	
Val Leu Phe Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe			
65	70	75	80
Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr Leu Asn Ile Thr Gly Ala			
85	90	95	
Gln Thr Leu Asp Glu Ala His Tyr Tyr Cys Gln Val Trp Asp Ala Asp			
100	105	110	
Thr Gly Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Glu			
115	120	125	
Thr Leu Cys Val Ile Ser Phe Phe Val Cys Pro Leu Ser Asn Glu Asp			
130	135	140	
Gln Ser Phe Ser Leu His Ser Arg Pro Asp Arg Gly Pro Leu Ser Ser			
145	150	155	160
Leu Leu Arg Pro Ser Ile Gly Ser Pro Arg Arg His Thr His Ser Met			
165	170	175	
Thr Asp Thr Arg Val Arg Gly Gln Asp Gly Val Ala Tyr			
180	185		

&lt;210&gt; 3524

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3524

Met Gly Asp Leu Thr Cys Arg Thr Trp Thr Cys Gln His Arg Ser Leu			
1	5	10	15
Leu Thr Leu Pro Val Cys Gly Phe Leu Pro Ser Cys Ala Pro Trp Leu			
20	25	30	
Arg Arg Pro Gly Asn Ser Ser Leu Gly Ile Pro Ala Glu Gln Leu Leu			

35	40	45
Gly Leu Gly Tyr Thr Ser Gln Trp Glu Gly Leu Ala Trp Gly Leu Arg		
50	55	60
Ala Arg Gly Gly Val Val Gly Gly Val Cys Leu Thr Ser Lys Asn Leu		
65	70	75
80		
Leu Gln Ile Arg Glu Asn Met Lys Glu Leu Asp Phe Gly Phe Pro Gly		
85	90	95
Leu Pro Asp Leu Val Ala Leu Gly Ser Gly Asp Ile Trp Arg Leu Ile		
100	105	110
Leu Cys Ser Arg Asp Lys Asn Pro Leu His Ala His Ser Leu Phe Pro		
115	120	125
Leu Asn Arg Glu Lys Leu Gly Leu Glu Asp Thr Ala Pro Thr Ser		
130	135	140

&lt;210&gt; 3525

&lt;211&gt; 313

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3525

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro		
1	5	10
15		
Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu Ile Ser Gly Phe Leu		
20	25	30
Gly Gln Gly Ser Ser Gly Glu Ala Ala Leu Asp Val Leu Thr His Val		
35	40	45
Leu Glu Gly Ala Gly Asn Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser		
50	55	60
Ser Asn Arg Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr		
65	70	75
80		
Ala Glu Val Phe Val Val Leu Leu Leu Cys Ile Pro Phe Ile Ser Pro		
85	90	95
Lys Arg Trp Gln Lys Ile Phe Lys Ser Arg Leu Val Glu Leu Leu Val		
100	105	110
Ser Tyr Gly Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu		

115                      120                      125  
 Leu Val Ile Asp Ala Val Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr  
 130                      135                      140  
 Glu Lys Val Asn Leu Gln Asn Asn Pro Gly Ala Met Glu His Phe His  
 145                      150                      155                      160  
 Met Lys Leu Phe Arg Ala Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser  
 165                      170                      175  
 Leu Leu Leu Ser Phe Leu Leu Arg Arg Leu Val Thr Leu Ile Ser Gln  
 180                      185                      190  
 Gln Ala Thr Leu Leu Ala Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu  
 195                      200                      205  
 Ser Ala Ser Glu Ala Ala Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu  
 210                      215                      220  
 Lys Lys Gly Ala Ala Val Asp Gly Gly Lys Leu Asp Val Gly Asn Ala  
 225                      230                      235                      240  
 Glu Val Lys Leu Glu Glu Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln  
 245                      250                      255  
 Lys Leu Lys Asp Glu Leu Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala  
 260                      265                      270  
 Glu Asn Gln Val Leu Ala Met Arg Lys Gln Ser Glu Gly Leu Thr Lys  
 275                      280                      285  
 Glu Tyr Asp Arg Leu Leu Glu Glu His Ala Lys Leu Gln Ala Ala Val  
 290                      295                      300  
 Asp Gly Pro Met Asp Lys Lys Glu Glu  
 305                      310

<210> 3526

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3526

Met Glu Pro Ala Leu Arg Trp Arg Thr Gln Thr Leu Ser Leu Lys Gly  
 1                      5                      10                      15  
 Arg Arg Arg Thr Gly Asn Ser Trp Ala His Pro Arg Asp Lys Arg His

20 25 30  
 Arg Leu Asn Ile Ser Pro Pro Pro Ser Pro Thr Asn Leu Pro Arg Arg  
 35 40 45  
 Pro Ala Pro Thr Pro Pro Pro Arg Pro Asp Pro Pro Leu Ala Val Gly  
 50 55 60  
 Val Thr Gln Gly Gln Arg Leu Arg Val Pro Gly Asp Lys Val Gly His  
 65 70 75 80  
 Ser Ser Ser Leu His Pro Gly Pro Arg Asn Thr His Gln Arg Thr Ala  
 85 90 95  
 Val Arg Gly Arg Thr Arg Ala Cys Val Cys Val Cys Val Cys Val Arg  
 100 105 110  
 Ala Arg Ala Arg Ala His Thr Gly Gln Gly Ser Leu Ile Arg Asn Ala  
 115 120 125  
 Gly Gly Thr Ser Ser Val Ser Asp Phe Arg Phe Phe His Ile Ser Glu  
 130 135 140  
 Cys Leu His Tyr Ile Val Ser  
 145 150

<210> 3527

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3527

Met Cys Val Trp Arg Leu Ile Leu Asp Ala Val Asp Gly Arg Glu Cys  
 1 5 10 15  
 His His Leu Val His Cys Tyr Met Pro Gln Glu Ile Ile Ala Gln Pro  
 20 25 30  
 Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys  
 35 40 45  
 Lys Asn Lys Val Leu Arg Ala Tyr Asn Ile Leu Ile Gly Glu Leu Asp  
 50 55 60  
 Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg  
 65 70 75 80  
 Cys Cys Pro His Glu Arg His Ile His Val Cys Cys Glu Thr Asp Phe

	85	90	95
Ile	Ala His Leu Leu Gly Arg	Ala Glu Pro Glu Phe	Ala Gly Gly Arg
	100	105	110
Arg	Glu Arg His Ala Lys Thr Ile	Asp Ile Ala Gln Glu Glu	Val Leu
	115	120	125
Thr	Cys Leu Gly Ile His Leu Tyr Glu	Arg Leu His Arg Ile	Trp Gln
	130	135	140
Lys	Leu Arg Ala Glu Glu Gln Thr Trp	Gln Met Leu Phe Tyr	Leu Gly
145	150	155	160
Val	Asp Ala Leu Arg Lys Ser Phe Glu	Met Thr Val Glu Lys	Val Gln
	165	170	175
Gly	Ile Ser Arg Leu Glu Gln Leu Cys Glu	Glu Phe Ser Glu Glu Glu	
	180	185	190
Arg	Val Arg Glu Leu Lys Gln Glu Lys	Lys Arg Gln Lys Arg	Lys Asn
	195	200	205
Arg	Arg Lys Asn Lys Cys Val Cys Asp	Ile Pro Thr Pro Leu Gln	Thr
	210	215	220
Ala	Asp Glu Lys Glu Val Ser Gln Glu Lys	Glu Thr Asp Phe Ile Glu	
225	230	235	240
Asn	Ser Ser Cys Lys Ala Cys Gly Ser Thr	Glu Asp Gly Asn Thr Cys	
	245	250	255
Val	Glu Val Ile Val Thr Asn Glu Asn Thr	Ser Cys Thr Cys Pro Ser	
	260	265	270
Ser	Gly Asn Leu Leu Gly Ser Pro Lys Ile	Lys Lys Gly Leu Ser Pro	
	275	280	285
His	Cys Asn Gly Ser Asp Cys Gly Tyr Ser	Ser Ser Met Glu Gly Ser	
	290	295	300
Glu	Thr Gly Ser Arg Glu Gly Ser Asp Val	Ala Cys Thr Glu Gly Ile	
305	310	315	320
Cys	Asn His Asp Glu His Gly Asp Asp Ser	Cys Val His His Cys Glu	
	325	330	335
Asp	Lys Glu Asp Asp Gly Asp Ser Cys Val	Glu Cys Trp Ala Asn Ser	
	340	345	350
Glu	Glu Asn Asp Thr Lys Gly Lys Asn		
	355	360	

&lt;210&gt; 3528

&lt;211&gt; 130

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3528

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Met Arg Pro Gln Ser Phe Arg Ser Arg Pro Trp Gly Val Arg Ala Pro
 1             5             10             15
Pro Gly Asn Thr Val Arg Pro Gln Arg Leu Gln Pro Lys Leu Ala Arg
          20             25             30
Ser Met Gly Gln Val Pro Leu Cys Leu Glu Lys Pro Gly Ala Leu Leu
          35             40             45
Pro Cys Pro Pro Glu Pro Thr Ala Gly Arg Thr Pro Pro Ala Pro Pro
          50             55             60
His Pro Val Ala Arg Asp Pro Ser Glu Asn Ser Glu Ala Gly Pro Arg
 65             70             75             80
Ala Val Pro Ala Gly Ala Arg Pro Val Gly Arg Thr Gln Pro Arg Asn
          85             90             95
Gln Leu Pro Glu Thr Arg Val Pro Leu Gly Cys Pro Pro Ala Trp Arg
          100            105            110
Arg Pro Gln Ala Arg Ser His Pro Phe Pro Glu Leu Gln Asp Arg Ala
          115            120            125
Ser Ser
          130

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&lt;210&gt; 3529

&lt;211&gt; 327

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3529

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Met Gly Ile Cys Phe Glu Glu Lys Ser Cys Lys Cys Phe Cys Leu Ile
 1             5             10             15

```

Phe Ile Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn  
                   20                                  25                                  30  
 Ser Val Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe Ala  
                   35                                  40                                  45  
 Glu Gly Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg Ile Phe  
                   50                                  55                                  60  
 Gln Asp Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp Phe Ser Ser  
                   65                                  70                                  75                                  80  
 Leu Ser Lys Tyr Gly Asp His Thr Leu Arg Val Arg Ala Glu Phe Ala  
                                   85                                  90                                  95  
 Asp Glu His Ser Asp Trp Val Asn Ile Thr Phe Cys Pro Val Asp Asp  
                   100                                  105                                  110  
 Thr Ile Ile Gly Pro Pro Gly Met Gln Val Glu Val Leu Ala Asp Ser  
                   115                                  120                                  125  
 Leu His Met Arg Phe Leu Ala Pro Lys Ile Glu Asn Glu Tyr Glu Thr  
                   130                                  135                                  140  
 Trp Thr Met Lys Asn Val Tyr Asn Ser Trp Thr Tyr Asn Val Gln Tyr  
                   145                                  150                                  155                                  160  
 Trp Lys Asn Gly Thr Asp Glu Lys Phe Gln Ile Thr Pro Gln Tyr Asp  
                   165                                  170                                  175  
 Phe Glu Val Leu Arg Asn Leu Glu Pro Trp Thr Thr Tyr Cys Val Gln  
                   180                                  185                                  190  
 Val Arg Gly Phe Leu Pro Asp Arg Asn Lys Ala Gly Glu Trp Ser Glu  
                   195                                  200                                  205  
 Pro Val Cys Glu Gln Thr Thr His Asp Glu Thr Val Pro Ser Trp Met  
                   210                                  215                                  220  
 Val Ala Val Ile Leu Met Ala Ser Val Phe Met Val Cys Leu Ala Leu  
                   225                                  230                                  235                                  240  
 Leu Gly Cys Phe Ala Leu Leu Trp Cys Val Tyr Lys Lys Thr Lys Tyr  
                   245                                  250                                  255  
 Ala Phe Ser Pro Arg Asn Ser Leu Pro Gln His Leu Lys Glu Phe Leu  
                   260                                  265                                  270  
 Gly His Pro His His Asn Thr Leu Leu Phe Phe Ser Phe Pro Leu Ser  
                   275                                  280                                  285  
 Asp Glu Asn Asp Val Phe Asp Lys Leu Ser Val Ile Ala Glu Asp Ser  
                   290                                  295                                  300

Glu Ser Gly Lys Gln Asn Pro Gly Asp Ser Cys Ser Leu Gly Thr Pro  
 305 310 315 320

Pro Gly Gln Gly Pro Gln Ser

325

<210> 3530

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3530

Met Leu Glu Lys Gly Ala Leu Asp Leu Ala Thr Ser Gly Leu Cys Thr  
 1 5 10 15

Pro Gly Ala Glu Gly Thr Gln Gly Cys Thr Tyr Thr Leu Lys Ala Thr  
 20 25 30

Val Arg Thr Gly Glu Gln Gly Gln Arg Ala Met Glu Ser Pro Ala Glu  
 35 40 45

Gly Cys Thr Ser Arg Leu Lys Arg Ala Leu Pro Ala Ser Ala Arg Lys  
 50 55 60

Pro Gly Leu Trp Gly Cys Val Ile Val Asp Asp His Phe Gln Val Met  
 65 70 75 80

Ala Thr Ala Pro Val Leu Val Thr Ala Gly Pro Pro Ile Leu Leu Arg  
 85 90 95

His Pro Pro Leu Ser His Arg Ala Val Phe Arg Ala Ser Ala Gly Leu  
 100 105 110

Ser Cys Cys Ser Gln Thr Leu Ala Leu Arg Lys Ala Gly Gln Ser Thr  
 115 120 125

Ser Cys Ser Leu Arg Gly Gly Gln Val Phe Val Ser Lys Gly Gly Lys  
 130 135 140

Pro Gly Glu Arg Arg His Gln Ala Pro Glu Thr Phe Glu Met Thr Ser  
 145 150 155 160

Glu Asp Pro Gly Pro Leu Arg Val Thr Thr Ser Asp Ser Cys Leu Pro  
 165 170 175

Gln Ala Val Thr Asp Val  
 180



&lt;210&gt; 3531

&lt;211&gt; 430

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3531

```

Met Phe Asp Gly Tyr Asp Ser Cys Ser Glu Asp Thr Ser Ser Ser Ser
 1             5             10             15
Ser Ser Glu Glu Ser Glu Glu Glu Val Ala Pro Leu Pro Ser Asn Leu
      20             25             30
Pro Ile Ile Lys Asn Asn Gly Gln Val Tyr Thr Tyr Pro Asp Gly Lys
      35             40             45
Ser Gly Met Ala Thr Cys Glu Met Cys Gly Met Val Gly Val Arg Asp
      50             55             60
Ala Phe Tyr Ser Lys Thr Lys Arg Phe Cys Ser Val Ser Cys Ser Arg
      65             70             75             80
Ser Tyr Ser Ser Asn Ser Lys Lys Ala Ser Ile Leu Ala Arg Leu Gln
      85             90             95
Gly Lys Pro Pro Thr Lys Lys Ala Lys Val Leu Gln Lys Gln Pro Leu
      100            105            110
Val Ala Lys Leu Ala Ala Tyr Ala Gln Tyr Gln Ala Thr Leu Gln Asn
      115            120            125
Gln Ala Lys Thr Lys Ala Ala Val Ser Met Glu Gly Phe Ser Trp Gly
      130            135            140
Asn Tyr Ile Asn Ser Asn Ser Phe Ile Ala Ala Pro Val Thr Cys Phe
      145            150            155            160
Lys His Ala Pro Met Gly Thr Cys Trp Gly Asp Ile Ser Glu Asn Val
      165            170            175
Arg Val Glu Val Pro Asn Thr Asp Cys Ser Leu Pro Thr Lys Val Phe
      180            185            190
Trp Ile Ala Gly Ile Val Lys Leu Ala Gly Tyr Asn Ala Leu Leu Arg
      195            200            205
Tyr Glu Gly Phe Glu Asn Asp Ser Gly Leu Asp Phe Trp Cys Asn Ile
      210            215            220

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Cys Gly Ser Asp Ile His Pro Val Gly Trp Cys Ala Ala Ser Gly Lys  
 225 230 235 240  
 Pro Leu Val Pro Pro Arg Thr Ile Gln His Lys Tyr Thr Asn Trp Lys  
 245 250 255  
 Ala Phe Leu Val Lys Arg Leu Thr Gly Ala Lys Thr Leu Pro Pro Asp  
 260 265 270  
 Phe Ser Gln Lys Val Ser Glu Ser Met Gln Tyr Pro Phe Lys Pro Cys  
 275 280 285  
 Met Arg Val Glu Val Val Asp Lys Arg His Leu Cys Arg Thr Arg Val  
 290 295 300  
 Ala Val Val Glu Ser Val Ile Gly Gly Arg Leu Arg Leu Val Tyr Glu  
 305 310 315 320  
 Glu Ser Glu Asp Arg Thr Asp Asp Phe Trp Cys His Met His Ser Pro  
 325 330 335  
 Leu Ile His His Ile Gly Trp Ser Arg Ser Ile Gly His Arg Phe Lys  
 340 345 350  
 Arg Ser Asp Ile Thr Lys Lys Gln Asp Gly His Phe Asp Thr Pro Pro  
 355 360 365  
 His Leu Phe Ala Lys Val Lys Glu Val Asp Gln Ser Gly Glu Trp Phe  
 370 375 380  
 Lys Glu Gly Met Lys Leu Glu Ala Ile Asp Pro Leu Asn Leu Ser Thr  
 385 390 395 400  
 Ile Cys Val Ala Thr Ile Arg Lys Val Thr Gln Asn Phe Leu Leu Asn  
 405 410 415  
 Gly Leu Thr Thr Ser Gly Lys Leu Ala Pro Leu Gln His Gln  
 420 425 430

<210> 3532

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3532

Met Val Glu Gly Arg Arg Ala Leu Leu Gly Ala Trp Glu Ala Gly Phe

1

5

10

15

Arg Ala Ala Trp Ala Val Pro Pro Glu Gly Gln Asp Pro Thr Gly Gly  
                   20                                  25                                  30  
 Ala Arg Ala Ala Thr Pro Gln Thr Asn Glu Phe Lys Gly Ala Thr Glu  
                   35                                  40                                  45  
 Glu Ala Pro Ala Lys Glu Ser Pro His Thr Gly Glu Phe Lys Gly Ala  
                   50                                  55                                  60  
 Ala Leu Val Ser Pro Ile Ser Lys Arg Met Leu Glu Arg Leu Ser Lys  
                   65                                  70                                  75                                  80  
 Phe Glu Val Gly Asp Ala Glu Asn Val Ala Ser Tyr Glu Leu Phe Gly  
                                   85                                  90                                  95  
 Val Phe Leu Val Leu Leu Asp Val Thr Leu Val Leu Ala Asp Leu Ile  
                   100                                  105                                  110  
 Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser  
                   115                                  120                                  125  
 Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe  
                   130                                  135                                  140  
 Val Glu Gly Phe  
 145

<210> 3533

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3533

Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro  
           1                                  5                                  10                                  15  
 Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp  
                   20                                  25                                  30  
 Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys Ile  
                   35                                  40                                  45  
 Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly  
                   50                                  55                                  60  
 Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg  
                   65                                  70                                  75                                  80

Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr  
                     85                    90                    95  
 Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile  
                     100                    105                    110  
 Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro  
                     115                    120                    125  
 Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe  
                     130                    135                    140  
 Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln  
                     145                    150                    155                    160  
 Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu  
                     165                    170                    175  
 Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile  
                     180                    185                    190  
 Phe Val Ser Pro Tyr Asp Phe  
                     195

<210> 3534

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3534

Met Ile Leu Leu Glu Thr Arg Pro Ala Ser Thr Cys Pro Pro Trp Ser  
   1                    5                    10                    15  
 Gln Glu Ala Leu Glu Glu Lys Cys Ser Ile Leu Asp Asp Phe Pro Arg  
                     20                    25                    30  
 Pro Leu Cys Cys Gln Gln Trp Arg His Pro Glu Leu Ala Glu Val Gly  
                     35                    40                    45  
 Thr Ser Tyr Leu Lys Pro Asn Lys Cys Ser Pro Ser Gly Pro Asn Pro  
                     50                    55                    60  
 Gln Cys Leu Ala Leu Cys Leu Leu Ala Leu Ala Leu Thr Ile Gly Ala  
                     65                    70                    75                    80  
 Ile His Thr Ala Ile Leu Glu Gly Arg Gly His Ser Pro Ser Ser Lys  
                     85                    90                    95

Lys Glu Asp Gly

100

<210> 3535

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3535

Met Ser Met Met Ser Ser Arg Lys Thr Met Lys Ala Thr Ile Pro Pro

1 5 10 15

Met Met Ala Cys Pro Ala His Leu Arg Ile Phe Leu Glu Glu Asp Ala

20 25 30

Val Ala Pro Ser Thr Thr Arg Arg Gln His Trp Lys Gln Thr Gln Ser

35 40 45

Asn Arg Thr Pro Ser Ala Trp Leu Leu Ser Thr Lys Gln Arg Gly Asp

50 55 60

Gln Gln Asp Thr Asn His Lys Gly Thr Arg Thr Phe Ser His Cys Gln

65 70 75 80

Ser Ser Ser Asp Trp Ser Gly Glu Ile Trp Gly Gln Arg Pro Glu Leu

85 90 95

Ser Ala Leu Ser Leu Leu Leu Ala Ser Tyr Asn Ser Leu Val Val Leu

100 105 110

Arg Gln Leu Pro His Ala Glu Val Cys Pro Trp Ser Gly Asn His Pro

115 120 125

Ser Arg His Ser Asp Pro Lys Asn Ser Asp Leu Leu Ser Leu Gly Gly

130 135 140

Leu Ala Leu Ile Pro Ser Thr Val Leu Met Ser Val Ser Ser Lys Gly

145 150 155 160

Ala Ser Asp Val Ser Pro Thr Met His Phe Pro Tyr Ser Glu Lys Arg

165 170 175

<210> 3536

<211> 203

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3536

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Met Asp Ser Ala Pro Ala Gly Ser Phe Ser Ala Ser Ser Phe Phe Asp
  1             5             10             15
Leu Ser Val Thr Val Thr Arg Ala Lys Asn Ser Arg Gly Pro Ser Ser
      20             25             30
Ser Pro Ser Glu Leu Gln Gly Ala His Cys Leu Thr Ser Ser Leu Ala
      35             40             45
Ala Ala Cys Ser Val Ala Tyr Ser Ala Leu Trp Ser Ser Ser Pro Leu
      50             55             60
Arg Ser Pro Trp Ser Ile Ser Ser Ile Thr Met Pro Arg Leu Ser Ser
      65             70             75             80
Glu Glu Ser Ser Ala Ser Leu Leu Ala Gly Ala Asp Gly Arg Pro Pro
      85             90             95
Arg Leu Leu Phe Leu Pro Phe Trp Val Asn Leu Leu Arg Leu Val Leu
      100            105            110
Phe Leu Arg Pro Arg Arg Pro Leu Leu Gly Phe Leu Ala Ala Pro Arg
      115            120            125
Ser Glu Pro Ala Cys Pro Val Thr Ser Pro Glu Ser Trp Ala Cys Val
      130            135            140
Ser Glu Ala Gly Gly Val Gly Ala Ser Pro Gly Val Pro Ala Ser Ala
      145            150            155            160
Ala Cys Val Gly Pro Ser Ser Ser Ser Arg Arg Leu Ile Cys Leu Arg
      165            170            175
Thr Leu Val Ser Cys Ala Arg Ser Phe His Arg Thr Leu Gln Thr Pro
      180            185            190
Ser Leu Pro Gly Ile Ser Leu Gly Met Ala Ala
      195            200

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&lt;210&gt; 3537

&lt;211&gt; 536

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3537

Met	Ser	Ala	Arg	Val	Pro	Val	Ser	Phe	Cys	Ile	Tyr	Ile	His	Ala	Cys
1				5					10					15	
Val	Pro	Val	Phe	Leu	Arg	Val	Leu	Val	Cys	Ala	Arg	Val	His	Leu	Cys
			20					25					30		
Val	Cys	Gln	Ser	Met	Cys	Ala	Cys	Val	Cys	Leu	Ser	Ala	Tyr	Pro	Cys
		35				40						45			
Val	His	Val	Cys	Val	Cys	Gln	Arg	Ile	Arg	Val	Cys	Met	Cys	Val	Ser
	50					55				60					
Val	Ser	Leu	Thr	Met	Cys	Ala	Cys	Val	Cys	Gln	Cys	Ile	Arg	Val	Cys
65				70					75					80	
Ile	Cys	Val	Ser	Val	His	Val	Ser	Ala	Cys	Ala	Cys	Val	Tyr	Leu	Cys
			85					90					95		
Val	Ser	Ile	Lys	Gly	Pro	Pro	Arg	Pro	Gly	Ala	His	Arg	Pro	Pro	Gln
		100					105					110			
Arg	Thr	Leu	His	Cys	Ser	Asp	Ser	Ser	Ser	Asp	Thr	Asp	Ser	Phe	Tyr
	115					120					125				
Gly	Ala	Val	Glu	Arg	Pro	Val	Asp	Ile	Ser	Leu	Ser	Pro	Tyr	Pro	Thr
	130				135					140					
Asp	Asn	Glu	Asp	Tyr	Glu	His	Asp	Asp	Glu	Asp	Asp	Ser	Tyr	Leu	Glu
145				150					155				160		
Pro	Asp	Ser	Pro	Glu	Pro	Gly	Arg	Leu	Glu	Asp	Ala	Leu	Met	His	Pro
		165					170				175				
Pro	Ala	Tyr	Pro	Pro	Pro	Pro	Val	Pro	Thr	Pro	Arg	Lys	Pro	Ala	Phe
	180						185				190				
Ser	Asp	Met	Pro	Arg	Ala	His	Ser	Phe	Thr	Ser	Lys	Gly	Pro	Gly	Pro
	195				200						205				
Leu	Leu	Pro	Pro	Pro	Pro	Pro	Lys	His	Gly	Leu	Pro	Asp	Val	Gly	Leu
	210				215					220					
Ala	Ala	Glu	Asp	Ser	Lys	Arg	Asp	Pro	Leu	Cys	Pro	Arg	Arg	Ala	Glu
225				230					235				240		
Pro	Cys	Pro	Arg	Val	Pro	Ala	Thr	Pro	Arg	Arg	Met	Ser	Asp	Pro	Pro
		245					250				255				
Leu	Ser	Thr	Met	Pro	Thr	Ala	Pro	Gly	Leu	Arg	Lys	Pro	Pro	Cys	Phe
	260						265				270				

Arg Glu Ser Ala Ser Pro Ser Pro Glu Pro Trp Thr Pro Gly His Gly  
 275 280 285  
 Ala Cys Ser Thr Ser Ser Ala Ala Ile Met Ala Thr Ala Thr Ser Arg  
 290 295 300  
 Asn Cys Asp Lys Leu Lys Ser Phe His Leu Ser Pro Arg Gly Pro Pro  
 305 310 315 320  
 Thr Ser Glu Pro Pro Pro Val Pro Ala Asn Lys Pro Lys Phe Leu Lys  
 325 330 335  
 Ile Ala Glu Glu Asp Pro Pro Arg Glu Ala Ala Met Pro Gly Leu Phe  
 340 345 350  
 Val Pro Pro Val Ala Pro Arg Pro Pro Ala Leu Lys Leu Pro Val Pro  
 355 360 365  
 Glu Ala Met Ala Arg Pro Ala Val Leu Pro Arg Pro Glu Lys Pro Gln  
 370 375 380  
 Leu Pro His Leu Gln Arg Ser Pro Pro Asp Gly Gln Ser Phe Arg Ser  
 385 390 395 400  
 Phe Ser Phe Glu Lys Pro Arg Gln Pro Ser Gln Ala Asp Thr Gly Gly  
 405 410 415  
 Asp Asp Ser Asp Glu Asp Tyr Glu Lys Val Pro Leu Pro Asn Ser Val  
 420 425 430  
 Phe Val Asn Thr Thr Glu Ser Cys Glu Val Glu Arg Leu Phe Lys Ala  
 435 440 445  
 Thr Ser Pro Arg Gly Glu Pro Gln Asp Gly Leu Tyr Cys Ile Arg Asn  
 450 455 460  
 Ser Ser Thr Lys Ser Gly Lys Val Leu Val Val Trp Asp Glu Thr Ser  
 465 470 475 480  
 Asn Lys Val Arg Asn Tyr Arg Ile Phe Glu Lys Asp Ser Lys Phe Tyr  
 485 490 495  
 Leu Glu Gly Glu Val Leu Phe Val Ser Val Gly Ser Met Val Glu His  
 500 505 510  
 Tyr His Thr His Val Leu Pro Ser His Gln Ser Leu Leu Leu Arg His  
 515 520 525  
 Pro Tyr Gly Tyr Thr Gly Pro Arg  
 530 535



&lt;210&gt; 3538

&lt;211&gt; 472

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3538

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Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly
  1             5             10             15
Val Gln Cys Glu Pro His Leu Val Glu Ser Gly Gly Gly Leu Val Glu
      20             25             30
Pro Gly Arg Ser Leu Arg Leu Ser Cys Thr Ala Ser Gly Phe Ala Leu
      35             40             45
Gly Asp Tyr Ala Val Ser Trp Leu Arg Gln Ala Pro Gly Lys Gly Leu
      50             55             60
Glu Trp Val Gly Phe Ile Arg Ser Glu Thr Leu Gly Gly Thr Pro Glu
      65             70             75             80
Asn Ala Ala Ser Leu Glu Gly Arg Cys Leu Ile Ser Arg Asp Asp Ser
      85             90             95
Lys Asn Ser Ala Tyr Leu His Leu Ser Ser Leu Lys Phe Glu Asp Thr
      100            105            110
Gly Arg Tyr Tyr Cys Met Ala Asp Arg Tyr Asp Glu Arg Asp Tyr Phe
      115            120            125
Tyr Val Gly Gly Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser
      130            135            140
Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr
      145            150            155            160
Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro
      165            170            175
Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val
      180            185            190
His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser
      195            200            205
Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln Thr Tyr Ile
      210            215            220
Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp Lys Lys Val
      225            230            235            240

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Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala  
                   245                  250                  255  
 Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro  
                   260                  265                  270  
 Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val  
                   275                  280                  285  
 Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val  
                   290                  295                  300  
 Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln  
 305                  310                  315                  320  
 Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln  
                   325                  330                  335  
 Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala  
                   340                  345                  350  
 Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro  
                   355                  360                  365  
 Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr  
                   370                  375                  380  
 Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser  
 385                  390                  395                  400  
 Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr  
                   405                  410                  415  
 Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr  
                   420                  425                  430  
 Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe  
                   435                  440                  445  
 Ser Cys Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys  
                   450                  455                  460  
 Ser Leu Ser Leu Ser Pro Gly Lys  
 465                  470

<210> 3539

<211> 447

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3539

Met Glu Phe Gly Leu Thr Trp Val Phe Leu Val Ala Leu Leu Arg Gly  
 1 5 10 15  
 Val Gln Cys Gln Val His Leu Val Glu Ser Gly Gly Gly Val Gly Gln  
 20 25 30  
 Pro Gly Lys Ser Leu Lys Leu Ser Cys Gln Ala Phe His Leu Asp Phe  
 35 40 45  
 Lys His Leu Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu  
 50 55 60  
 Glu Trp Leu Ala Val Ile Trp Tyr Asp Gly Ser Asn Ile Phe Tyr Ala  
 65 70 75 80  
 Asp Ser Ile Lys Asp Arg Phe Ile Ile Ser Arg Asp Asn Gly Asn Arg  
 85 90 95  
 Thr Leu Tyr Leu Gln Met Asp Asn Leu Arg Ala Asp Asp Thr Ala Val  
 100 105 110  
 Tyr Phe Cys Val Thr Gly Arg Arg Glu Ser Gly Ser Ser Leu Trp Gly  
 115 120 125  
 Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser  
 130 135 140  
 Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly Gly Thr Ala  
 145 150 155 160  
 Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Ala Val Leu Gln Ser  
 165 170 175  
 Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser  
 180 185 190  
 Leu Gly Thr Gln Thr Tyr Ile Cys Asn Val Asn His Lys Pro Gly Asn  
 195 200 205  
 Thr Lys Val Asp Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His  
 210 215 220  
 Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val  
 225 230 235 240  
 Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr  
 245 250 255  
 Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu

260	265	270
Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys		
275	280	285
Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser		
290	295	300
Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys		
305	310	315
Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile		
325	330	335
Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro		
340	345	350
Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu		
355	360	365
Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn		
370	375	380
Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser		
385	390	395
Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg		
405	410	415
Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu		
420	425	430
His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys		
435	440	445

&lt;210&gt; 3540

&lt;211&gt; 145

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3540

Met Leu Thr Arg Leu Val Leu Ser Ala His Leu Ser Ser Thr Thr Ser
1 5 10 15
Pro Pro Trp Thr His Ala Ala Ile Ser Trp Glu Leu Asp Asn Val Leu
20 25 30
Met Pro Ser Pro Arg Ile Trp Pro Gln Val Thr Pro Thr Gly Arg Ser

35 40 45  
 Ala Ser Val Arg Ser Glu Gly Asn Thr Ser Ser Leu Trp Asn Phe Ser  
 50 55 60  
 Ala Gly Gln Asp Val His Ala Ile Val Thr Arg Thr Cys Glu Ser Val  
 65 70 75 80  
 Leu Ser Ser Ala Val Tyr Thr His Gly Cys Gly Cys Val Arg Ser Ala  
 85 90 95  
 Thr Asn Ile Thr Cys Gln Ser Ser Gly Gln Gln Arg Gln Ala Ala Arg  
 100 105 110  
 Gln Glu Glu Glu Asn Ser Ile Cys Lys Ala His Asp Ser Arg Glu Gly  
 115 120 125  
 Arg Leu Gly Tyr Pro Leu Ser Ala His Gln Pro Gly Ser Gly Gly Pro  
 130 135 140  
 Asn  
 145

&lt;210&gt; 3541

&lt;211&gt; 805

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3541

Met Ala Ala Ser Gly Val Pro Arg Gly Cys Asp Ile Leu Ile Val Tyr  
 1 5 10 15  
 Ser Pro Asp Ala Lys Glu Trp Cys Gln Tyr Leu Gln Thr Leu Phe Leu  
 20 25 30  
 Ser Ser Arg Gln Val Arg Ser Gln Lys Ile Leu Thr His Arg Leu Gly  
 35 40 45  
 Pro Glu Ala Ser Phe Ser Ala Glu Asp Leu Ser Leu Phe Leu Ser Thr  
 50 55 60  
 Arg Cys Val Val Val Leu Leu Ser Ala Glu Leu Val Gln His Phe His  
 65 70 75 80  
 Lys Pro Ala Leu Leu Pro Leu Leu Gln Arg Ala Phe His Pro Pro His  
 85 90 95  
 Arg Val Val Arg Leu Leu Cys Gly Val Arg Asp Ser Glu Glu Phe Leu

100	105	110	
Asp Phe Phe Pro Asp Trp Ala His Trp Gln Glu Leu Thr Cys Asp Asp			
115	120	125	
Glu Pro Glu Thr Tyr Val Ala Ala Val Lys Lys Ala Ile Ser Glu Asp			
130	135	140	
Ser Gly Cys Asp Ser Val Thr Asp Thr Glu Pro Glu Asp Glu Lys Val			
145	150	155	160
Val Ser Tyr Ser Lys Gln Gln Asn Leu Pro Thr Val Thr Ser Pro Gly			
165	170	175	
Asn Leu Met Val Val Gln Pro Asp Arg Ile Arg Cys Gly Ala Glu Thr			
180	185	190	
Thr Val Tyr Val Ile Val Arg Cys Lys Leu Asp Asp Arg Val Ala Thr			
195	200	205	
Glu Ala Glu Phe Ser Pro Glu Asp Ser Pro Ser Val Arg Met Glu Ala			
210	215	220	
Lys Val Glu Asn Glu Tyr Thr Ile Ser Val Lys Ala Pro Asn Leu Ser			
225	230	235	240
Ser Gly Asn Val Ser Leu Lys Ile Tyr Ser Gly Asp Leu Val Val Cys			
245	250	255	
Glu Thr Val Ile Ser Tyr Tyr Thr Asp Met Glu Glu Ile Gly Asn Leu			
260	265	270	
Leu Ser Asn Ala Ala Asn Pro Val Glu Phe Met Cys Gln Ala Phe Lys			
275	280	285	
Ile Val Pro Tyr Asn Thr Glu Thr Leu Asp Lys Leu Leu Thr Glu Ser			
290	295	300	
Leu Lys Asn Asn Ile Pro Ala Ser Gly Leu His Leu Phe Gly Ile Asn			
305	310	315	320
Gln Leu Glu Glu Glu Asp Met Met Thr Asn Gln Arg Asp Glu Glu Leu			
325	330	335	
Pro Thr Leu Leu His Phe Ala Ala Lys Tyr Gly Leu Lys Asn Leu Thr			
340	345	350	
Ala Leu Leu Leu Thr Cys Pro Gly Ala Leu Gln Ala Tyr Ser Val Ala			
355	360	365	
Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys His Gly Phe			
370	375	380	
Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr Val Asp Met			

385                      390                      395                      400  
 Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu Glu Ala Asp  
                             405                      410                      415  
 Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu Leu Met Lys  
                             420                      425                      430  
 Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu Ser Met Ala  
                             435                      440                      445  
 Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu Met Leu Gln  
                             450                      455                      460  
 Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser Arg Ala Thr  
 465                      470                      475                      480  
 Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser Met Gly Met  
                             485                      490                      495  
 Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu Glu Asp Val  
                             500                      505                      510  
 Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp Leu Ala Ser  
                             515                      520                      525  
 Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala Pro Gly Ala  
                             530                      535                      540  
 His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Val Phe Ala Glu  
 545                      550                      555                      560  
 Lys Ser Gln Glu Arg Pro Gly Asn Phe Tyr Val Ser Ser Glu Ser Ile  
                             565                      570                      575  
 Arg Lys Gly Pro Pro Val Arg Pro Trp Arg Asp Arg Pro Gln Ser Ser  
                             580                      585                      590  
 Ile Tyr Asp Pro Phe Ala Gly Met Lys Thr Pro Gly Gln Arg Gln Leu  
                             595                      600                      605  
 Ile Thr Leu Gln Glu Gln Val Lys Leu Gly Ile Val Asn Val Asp Glu  
                             610                      615                      620  
 Ala Val Leu His Phe Lys Glu Trp Gln Leu Asn Gln Lys Lys Arg Ser  
 625                      630                      635                      640  
 Glu Ser Phe Arg Phe Gln Gln Glu Asn Leu Lys Arg Leu Arg Asp Ser  
                             645                      650                      655  
 Ile Thr Arg Arg Gln Arg Glu Lys Gln Lys Ser Gly Lys Gln Thr Asp  
                             660                      665                      670  
 Leu Glu Ile Thr Val Pro Ile Arg His Ser Gln His Leu Pro Ala Lys

675                      680                      685  
 Val Glu Phe Gly Val Tyr Glu Ser Gly Pro Arg Lys Ser Val Ile Pro  
 690                      695                      700  
 Pro Arg Thr Glu Leu Arg Arg Gly Asp Trp Lys Thr Asp Ser Thr Ser  
 705                      710                      715                      720  
 Ser Thr Ala Ser Ser Thr Ser Asn Arg Ser Ser Thr Arg Ser Leu Leu  
 725                      730                      735  
 Ser Val Ser Ser Gly Met Glu Gly Asp Asn Glu Asp Asn Glu Val Pro  
 740                      745                      750  
 Glu Val Thr Arg Ser Arg Ser Pro Gly Pro Pro Gln Val Asp Gly Thr  
 755                      760                      765  
 Pro Thr Met Ser Leu Glu Arg Pro Pro Arg Val Pro Pro Arg Ala Ala  
 770                      775                      780  
 Ser Gln Arg Pro Pro Thr Arg Glu Thr Phe His Pro Pro Pro Pro Val  
 785                      790                      795                      800  
 Pro Pro Arg Gly Arg  
 805

<210> 3542

<211> 296

<212> PRT

<213> Homo sapiens

<400> 3542

Met Gly Trp Gly Cys Arg Val Pro Gly Trp Gly Gly Ala Ala Leu Gly  
 1                      5                      10                      15  
 Arg Pro Asp Phe Gly Thr Gly Leu Arg Ala Arg Val Ser Gly Pro Gly  
 20                      25                      30  
 Ser Ala Gly Phe Arg Ala Glu Lys Glu Gly Gln Arg Lys Arg Ser Gly  
 35                      40                      45  
 Ser Pro Pro Ala Pro Ala Ser Leu Pro Glu Tyr Lys Pro Leu Glu Ala  
 50                      55                      60  
 Arg Phe Trp Val Ala Ala Ala Gln Pro Phe Arg Ser Pro Leu Leu Pro  
 65                      70                      75                      80  
 Thr Asp Val Tyr Ser Cys Ser Leu Tyr Phe Ser Leu His Ser Pro Val



	85		90		95										
Glu	Pro	Pro	Arg	Gln	Arg	Arg	Gly	Arg	Val	Leu	Leu	Leu	Ser	Arg	Leu
			100						105						110
Arg	Leu	Pro	Pro	Ser	His	Pro	Thr	Ala	Gln	Glu	Glu	Leu	Arg	Ala	Arg
			115						120						125
Pro	Trp	Asp	Gly	Arg	Ser	Leu	Gly	Leu	Leu	Leu	Ala	Arg	Ala	Leu	Pro
			130						135						140
Gly	Val	Ala	Ala	Gly	Pro	Ser	Pro	Arg	Arg	Gly	Gly	His	Ser	Pro	Gly
145															160
Ala	Ala	Glu	Asn	Glu	Gly	Ser	Trp	Ala	Gly	Met	Leu	Asn	Phe	Pro	Ser
			165												175
Pro	Thr	Phe	Leu	Ser	Gln	Leu	Thr	Gly	Met	Cys	Ser	Ser	Ser	Ala	Arg
			180												190
Arg	Pro	Ala	Pro	Arg	Arg	Ser	Thr	Thr	Arg	Gly	Leu	Arg	Asn	Tyr	Lys
			195												205
Ser	Leu	His	Pro	Pro	Arg	Gln	Gly	Gln	Glu	Arg	Arg	Gly	Ala	Gly	Arg
			210												220
Ser	Gly	Ala	Arg	Trp	Trp	Glu	Leu	Gly	Thr	Asn	Lys	Gly	Gly	Cys	Gly
225															240
Glu	Arg	Cys	Leu	Leu	Cys	Thr	Gly	Gln	Phe	Ala	Arg	Tyr	Thr	Cys	Ser
			245												255
Leu	Ser	Asn	Leu	Arg	Arg	Asn	Pro	Val	Arg	His	Tyr	Cys	Ile	Gln	Leu
			260												270
Arg	Glu	Ser	Leu	Thr	Thr	Gly	Gln	Thr	Ser	Gln	Ser	Ser	Gln	Val	Val
			275												285
Glu	Met	Ala	Ser	Asn	Pro	Glu	Pro								
			290												295

&lt;210&gt; 3543

&lt;211&gt; 377

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3543

Met Ala Thr Ile Pro Asp Trp Lys Leu Gln Leu Leu Ala Arg Arg Arg

1	5	10	15
Gln Glu Glu Ala Ser Val Arg Gly Arg Glu Lys Ala Glu Arg Glu Arg			
20	25	30	
Leu Ser Gln Met Pro Ala Trp Lys Arg Gly Leu Leu Glu Arg Arg Arg			
35	40	45	
Ala Lys Leu Gly Leu Ser Pro Gly Glu Pro Ser Pro Val Leu Gly Thr			
50	55	60	
Val Glu Ala Gly Pro Pro Asp Pro Asp Glu Ser Ala Val Leu Leu Glu			
65	70	75	80
Thr Ile Gly Pro Val His Gln Asn Arg Phe Ile Arg Gln Glu Arg Gln			
85	90	95	
Gln Gln Gln Gln Gln Gln Gln Arg Ser Glu Glu Leu Leu Ala Glu Arg			
100	105	110	
Lys Pro Gly Pro Leu Glu Ala Arg Glu Arg Arg Pro Ser Pro Gly Glu			
115	120	125	
Met Arg Asp Gln Ser Pro Lys Gly Arg Glu Ser Arg Glu Glu Arg Leu			
130	135	140	
Ser Pro Arg Glu Thr Arg Glu Arg Arg Leu Gly Ile Gly Gly Ala Gln			
145	150	155	160
Glu Leu Ser Leu Arg Pro Leu Glu Ala Arg Asp Trp Arg Gln Ser Pro			
165	170	175	
Gly Glu Val Gly Asp Arg Ser Ser Arg Leu Ser Glu Ala Trp Lys Trp			
180	185	190	
Arg Leu Ser Pro Gly Glu Thr Pro Glu Arg Ser Leu Arg Leu Ala Glu			
195	200	205	
Ser Arg Glu Gln Ser Pro Arg Arg Lys Glu Val Glu Ser Arg Leu Ser			
210	215	220	
Pro Gly Glu Ser Ala Tyr Gln Lys Leu Gly Leu Thr Gly Ala His Lys			
225	230	235	240
Trp Arg Pro Asp Ser Arg Glu Ser Gln Glu Gln Ser Leu Val Gln Leu			
245	250	255	
Glu Ala Thr Glu Trp Arg Leu Arg Ser Gly Glu Glu Arg Gln Asp Tyr			
260	265	270	
Ser Glu Glu Cys Gly Arg Lys Glu Glu Trp Pro Val Pro Gly Val Ala			
275	280	285	
Pro Lys Glu Thr Ala Glu Leu Ser Glu Thr Leu Thr Arg Glu Ala Gln			

290                      295                      300  
 Gly Asn Ser Ser Ala Gly Val Glu Ala Ala Glu Gln Arg Pro Val Glu  
  
 305                      310                      315                      320  
 Asp Gly Glu Arg Gly Met Lys Pro Thr Glu Gly Trp Lys Trp Thr Leu  
  
                     325                      330                      335  
 Ile Met Ser Leu Ala Gly Lys Gly Asn Gln His Leu Val Thr Cys Phe  
  
                     340                      345                      350  
 Pro His Pro Val Ser Gly Gly Arg Ala Asn Cys Pro Ile Ser Thr Leu  
  
                     355                      360                      365  
 Ile Gln Ser Pro Trp Cys Gly Trp Gly  
  
                     370                      375

<210> 3544

<211> 1215

<212> PRT

<213> Homo sapiens

<400> 3544

Met Glu Ile Gln Val Met Ile Gln Phe Leu Pro Val Ile Leu Met Gln  
   1                      5                      10                      15  
 Leu Phe Arg Val Leu Thr Asn Met Thr His Glu Asp Asp Val Pro Ile  
                     20                      25                      30  
 Asn Cys Thr Met Val Leu Leu His Ile Val Ser Lys Cys His Glu Glu  
                     35                      40                      45  
 Gly Leu Asp Ser Tyr Leu Arg Ser Phe Ile Lys Tyr Ser Phe Arg Pro  
                     50                      55                      60  
 Glu Lys Pro Ser Ala Pro Gln Ala Gln Leu Ile His Glu Thr Leu Ala  
   65                      70                      75                      80  
 Thr Thr Met Ile Ala Ile Leu Lys Gln Ser Ala Asp Phe Leu Ser Ile  
                     85                      90                      95  
 Asn Lys Leu Leu Lys Tyr Ser Trp Phe Phe Phe Glu Ile Ile Ala Lys  
                     100                      105                      110  
 Ser Met Ala Thr Tyr Leu Leu Glu Glu Asn Lys Ile Lys Leu Pro Arg  
                     115                      120                      125

Gly Gln Arg Phe Pro Glu Thr Tyr His His Val Leu His Ser Leu Leu  
 130 135 140  
 Leu Ala Ile Ile Pro His Val Thr Ile Arg Tyr Ala Glu Ile Pro Asp  
 145 150 155 160  
 Glu Ser Arg Asn Val Asn Tyr Ser Leu Ala Ser Phe Leu Lys Arg Cys  
 165 170 175  
 Leu Thr Leu Met Asp Arg Gly Phe Ile Phe Asn Leu Ile Asn Asp Tyr  
 180 185 190  
 Ile Ser Gly Phe Ser Pro Lys Asp Pro Lys Val Leu Ala Glu Tyr Lys  
 195 200 205  
 Phe Glu Phe Leu Gln Thr Ile Cys Asn His Glu His Tyr Ile Pro Leu  
 210 215 220  
 Asn Leu Pro Met Ala Phe Ala Lys Pro Lys Leu Gln Arg Val Gln Asp  
 225 230 235 240  
 Ser Asn Leu Glu Tyr Ser Leu Ser Asp Glu Tyr Cys Lys His His Phe  
 245 250 255  
 Leu Val Gly Leu Leu Leu Arg Glu Thr Ser Ile Ala Leu Gln Asp Asn  
 260 265 270  
 Tyr Glu Ile Arg Tyr Thr Ala Ile Ser Val Ile Lys Asn Leu Leu Ile  
 275 280 285  
 Lys His Ala Phe Asp Thr Arg Tyr Gln His Lys Asn Gln Gln Ala Lys  
 290 295 300  
  
 Ile Ala Gln Leu Tyr Leu Pro Phe Val Gly Leu Leu Leu Glu Asn Ile  
 305 310 315 320  
 Gln Arg Leu Ala Gly Arg Asp Thr Leu Tyr Ser Cys Ala Ala Met Pro  
 325 330 335  
 Asn Ser Ala Ser Arg Asp Glu Phe Pro Cys Gly Phe Thr Ser Pro Ala  
 340 345 350  
 Asn Arg Gly Ser Leu Ser Thr Asp Lys Asp Thr Ala Tyr Gly Ser Phe  
 355 360 365  
 Gln Asn Gly His Gly Ile Lys Arg Glu Asp Ser Arg Gly Ser Leu Ile  
 370 375 380  
 Pro Glu Gly Ala Thr Gly Phe Pro Asp Gln Gly Asn Thr Gly Glu Asn  
 385 390 395 400  
 Thr Arg Gln Ser Ser Thr Arg Ser Ser Val Ser Gln Tyr Asn Arg Leu

	405		410		415										
Asp	Gln	Tyr	Glu	Ile	Arg	Ser	Leu	Leu	Met	Cys	Tyr	Leu	Tyr	Ile	Val
	420		425		430										
Lys	Met	Ile	Ser	Glu	Asp	Thr	Leu	Leu	Thr	Tyr	Trp	Asn	Lys	Val	Ser
	435		440		445										
Pro	Gln	Glu	Leu	Ile	Asn	Ile	Leu	Ile	Leu	Leu	Glu	Val	Cys	Leu	Phe
	450		455		460										
His	Phe	Arg	Tyr	Met	Gly	Lys	Arg	Asn	Ile	Ala	Arg	Val	His	Asp	Ala
465			470		475				480						
Trp	Leu	Ser	Lys	His	Phe	Gly	Ile	Asp	Arg	Lys	Ser	Gln	Thr	Met	Pro
	485		490		495										
Ala	Leu	Arg	Asn	Arg	Ser	Gly	Val	Met	Gln	Ala	Arg	Leu	Gln	His	Leu
	500		505		510										
Ser	Ser	Leu	Glu	Ser	Ser	Phe	Thr	Leu	Asn	His	Ser	Ser	Thr	Thr	Thr
	515		520		525										
Glu	Ala	Asp	Ile	Phe	His	Gln	Ala	Leu	Leu	Glu	Gly	Asn	Thr	Ala	Thr
	530		535		540										
Glu	Val	Ser	Leu	Thr	Val	Leu	Asp	Thr	Ile	Ser	Phe	Phe	Thr	Gln	Cys
545			550		555				560						
Phe	Lys	Thr	Gln	Leu	Leu	Asn	Asn	Asp	Gly	His	Asn	Pro	Leu	Met	Lys
	565		570		575										
Lys	Val	Phe	Asp	Ile	His	Leu	Ala	Phe	Leu	Lys	Asn	Gly	Gln	Ser	Glu
	580		585		590										
Val	Ser	Leu	Lys	His	Val	Phe	Ala	Ser	Leu	Arg	Ala	Phe	Ile	Ser	Lys
	595		600		605										
Phe	Pro	Ser	Ala	Phe	Phe	Lys	Gly	Arg	Val	Asn	Met	Cys	Ala	Ala	Phe
	610		615		620										
Cys	Tyr	Glu	Val	Leu	Lys	Cys	Cys	Thr	Ser	Lys	Ile	Ser	Ser	Thr	Arg
625			630		635				640						
Asn	Glu	Ala	Ser	Ala	Leu	Leu	Tyr	Leu	Leu	Met	Arg	Asn	Asn	Phe	Glu
	645		650		655										
Tyr	Thr	Lys	Arg	Lys	Thr	Phe	Leu	Arg	Thr	His	Leu	Gln	Ile	Ile	Ile
	660		665		670										
Ala	Val	Ser	Gln	Leu	Ile	Ala	Asp	Val	Ala	Leu	Ser	Gly	Gly	Ser	Arg
	675		680		685										
Phe	Gln	Glu	Ser	Leu	Phe	Ile	Ile	Asn	Asn	Phe	Ala	Asn	Ser	Asp	Arg

690	695	700	
Pro Met Lys Ala Thr	Ala Phe Pro Ala Glu Val	Lys Asp Leu Thr	Lys
705	710	715	720
Arg Ile Arg Thr Val	Leu Met Ala Thr Ala Gln Met	Lys Glu His Glu	
	725	730	735
Lys Asp Pro Glu Met	Leu Ile Asp Leu Gln Tyr Ser	Leu Ala Lys Ser	
	740	745	750
Tyr Ala Ser Thr Pro	Glu Leu Arg Lys Thr Trp Leu Asp	Ser Met Ala	
	755	760	765
Lys Ile His Val Lys	Asn Gly Asp Phe Ser Glu Ala Ala	Met Cys Tyr	
	770	775	780
Val His Val Ala Ala	Leu Val Ala Glu Phe Leu His Arg	Lys Lys Leu	
785	790	795	800
Phe Pro Asn Gly Cys	Ser Ala Phe Lys Lys Ile Thr Pro	Asn Ile Asp	
	805	810	815
Glu Glu Gly Ala Met	Lys Glu Asp Ala Gly Met Met	Asp Val His Tyr	
	820	825	830
Ser Glu Glu Val Leu	Leu Glu Leu Leu Glu Gln Cys	Val Asp Gly Leu	
	835	840	845
Trp Lys Ala Glu Arg	Tyr Glu Ile Ile Ser Glu Ile Ser	Lys Leu Ile	
	850	855	860
Val Pro Ile Tyr Glu	Lys Arg Arg Glu Phe Glu Lys Leu	Thr Gln Val	
865	870	875	880
Tyr Arg Thr Leu His	Gly Ala Tyr Thr Lys Ile Leu Glu	Val Met His	
	885	890	895
Thr Lys Lys Arg Leu	Leu Gly Thr Phe Phe Arg Val	Ala Phe Tyr Gly	
	900	905	910
Gln Ser Phe Phe Glu	Glu Glu Asp Gly Lys Glu Tyr Ile	Tyr Lys Glu	
	915	920	925
Pro Lys Leu Thr Gly	Leu Ser Glu Ile Ser Leu Arg	Leu Val Lys Leu	
	930	935	940
Tyr Gly Glu Lys Phe	Gly Thr Glu Asn Val Lys Ile Ile	Gln Asp Ser	
945	950	955	960
Asp Lys Val Asn Ala	Lys Glu Leu Asp Pro Lys Tyr	Ala His Ile Gln	
	965	970	975
Val Thr Tyr Val Lys	Pro Tyr Phe Asp Asp Lys Glu	Leu Thr Glu Arg	

980	985	990	
Lys Thr Glu Phe Glu Arg Asn His Asn Ile Ser Arg Phe Val Phe Glu			
995	1000	1005	
Ala Pro Tyr Thr Leu Ser Gly Lys Lys Gln Gly Cys Ile Glu Glu Gln			
1010	1015	1020	
Cys Lys Arg Arg Thr Ile Leu Thr Thr Ser Asn Ser Phe Pro Tyr Val			
1025	1030	1035	1040
Lys Lys Arg Ile Pro Ile Asn Cys Glu Gln Gln Ile Asn Leu Lys Pro			
1045	1050	1055	
Ile Asp Val Ala Thr Asp Glu Ile Lys Asp Lys Thr Ala Glu Leu Gln			
1060	1065	1070	
Lys Leu Cys Ser Ser Thr Asp Val Asp Met Ile Gln Leu Gln Leu Lys			
1075	1080	1085	
Leu Gln Gly Cys Val Ser Val Gln Val Asn Ala Gly Pro Leu Ala Tyr			
1090	1095	1100	
Ala Arg Ala Phe Leu Asn Asp Ser Gln Ala Ser Lys Tyr Pro Pro Lys			
1105	1110	1115	1120
Lys Val Ser Glu Leu Lys Asp Met Phe Arg Lys Phe Ile Gln Ala Cys			
1125	1130	1135	
Ser Ile Ala Leu Glu Leu Asn Glu Arg Leu Ile Lys Glu Asp Gln Val			
1140	1145	1150	
Glu Tyr His Glu Gly Leu Lys Ser Asn Phe Arg Asp Met Val Lys Glu			
1155	1160	1165	
Leu Ser Asp Ile Ile His Glu Gln Ile Leu Gln Glu Asp Thr Met His			
1170	1175	1180	
Ser Pro Trp Met Ser Asn Thr Leu His Val Phe Cys Ala Ile Ser Gly			
1185	1190	1195	1200
Thr Ser Ser Asp Arg Gly Tyr Gly Ser Pro Arg Tyr Ala Glu Val			
1205	1210	1215	

&lt;210&gt; 3545

&lt;211&gt; 267

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

Met His Tyr Ile Lys Thr Trp Ser Leu Leu Gly Glu Met Ser Glu Lys  
 1 5 10 15  
 Leu Arg Arg Cys Arg Lys Glu Leu Thr Ala Ala Ile Asp Arg Ala Phe  
 20 25 30  
 Glu Gly Val Ser Tyr Ser Gln Glu Cys Thr Gly Gln Gln Arg Leu Glu  
 35 40 45  
 Leu Ser Ala Ala Pro Leu Ser Phe Ser Leu Pro Val His Arg Leu Leu  
 50 55 60  
 Cys Arg Arg His Pro Leu Ala Ala Cys Ser Ser Ala Ala Pro Phe Ala  
 65 70 75 80  
 Ala Val Pro Cys Ala Pro Glu Asn Glu Asn Pro Ala Phe Ala Thr Asn  
 85 90 95  
 His Ala Pro Val Asn Ala Lys Pro His Ala Leu Cys Pro Glu Arg Lys  
 100 105 110  
 Pro Leu Thr Ser Lys Glu Asn Val Leu Met His Ser Ser Ile Leu Ala  
 115 120 125  
 Pro Glu Arg Glu Ser Trp Arg Thr Ala Gly Glu Gly Glu Asn Trp Arg  
 130 135 140  
 Lys Glu Asn Leu Arg Lys Asp Met Glu Arg Asp Leu Lys Ala Asp Ser  
 145 150 155 160  
 Asn Met Pro Leu Asn Asn Ser Ser Gln Glu Val Thr Lys Asp Leu Leu  
 165 170 175  
 Asp Met Ile Asp His Thr Ser Ile Arg Thr Ile Glu Glu Leu Ala Gly  
 180 185 190  
 Lys Ile Glu Phe Glu Asn Glu Leu Asn His Met Cys Gly His Cys Gln  
 195 200 205  
 Asp Ser Pro Phe Lys Glu Glu Ala Trp Ala Leu Leu Met Asp Lys Ser  
 210 215 220  
 Pro Gln Lys Ala Thr Asp Ala Asp Pro Gly Ser Leu Lys Gln Ala Phe  
 225 230 235 240  
 Asp Asp His Asn Ile Val Glu Thr Val Leu Asp Leu Glu Glu Asp Tyr  
 245 250 255  
 Asn Val Met Thr Ser Phe Lys Tyr Gln Ile Glu  
 260 265



&lt;210&gt; 3546

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3546

```

Met Gly Val Cys Arg Thr Gln Tyr Phe Val Thr Gln Val Leu Ser Leu
  1             5             10             15
Val Pro Ile Ser Tyr Phe Ser Trp Ser Ser Pro Phe Ser His Pro Gly
             20             25             30
Thr Lys Phe Trp Thr Gln Leu Lys Phe Ile Cys Gln Thr Leu Val Lys
             35             40             45
Leu Gly Leu Phe Pro Pro Gln Glu Ser Gly Ile Arg Asp Leu Ile Pro
             50             55             60
Gly Ser Val Ile Asp Ala Thr Met Phe Asn Pro Cys Gly Tyr Ser Met
             65             70             75             80
Asn Gly Met Lys Ser Asp Gly Thr Tyr Trp Thr Ile His Ile Thr Pro
             85             90             95

Glu Pro Glu Phe Ser Tyr Val Ser Phe Glu Thr Asn Leu Ser Gln Thr
             100            105            110
Ser Tyr Asp Asp Leu Ile Arg Lys Val Val Glu Val Phe Lys Pro Gly
             115            120            125
Lys Phe Val Thr Thr Leu Phe Val Asn Gln Ser Ser Lys Cys Arg Thr
             130            135            140
Val Leu Ala Ser Pro Gln Lys Ile Glu Gly Phe Lys Arg Leu Asp Cys
             145            150            155            160
Gln Ser Ala Met Phe Asn Asp Tyr Asn Phe Val Phe Thr Ser Phe Ala
             165            170            175
Lys Lys Gln Gln Gln Gln Gln Ser
             180

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&lt;210&gt; 3547

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3547

```

Met Met Tyr Val Pro Gln Asn Gln Val Ile Leu Ser Val Leu Phe Gln
  1             5             10            15
Tyr Phe Phe Val Asn Leu Trp Ser Cys Ala Pro Ile Thr Thr Ile Pro
      20             25            30
Ile Leu Glu Arg Leu Tyr His Phe Leu Phe Pro Ser Pro Ala Leu Cys
      35             40            45
Asn His Glu Ser Ala Phe Cys Leu Tyr Gly Phe Ala Phe Phe Arg His
      50             55            60
Leu Tyr Gln Trp Gln Leu Thr Val His Gly Leu His Ala Trp Leu Leu
      65             70            75            80
Ser Leu Ser Ile Leu Phe Pro Arg Phe Ile His Val Val Ala Cys Gly
      85             90            95
Ser Ala Ser Phe Leu Ser Val Ala Glu Glu Tyr Ser Ile Val Trp Thr
      100            105            110
Asp Arg Val Leu Ile Ile His Ser Ser Val Asp Gly His Arg Gly Cys
      115            120            125
Phe His Leu Pro
      130

```

&lt;210&gt; 3548

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3548

```

Met Ala Cys His Phe Tyr Leu Ser Thr Ser Ala His Gln Leu Met Pro
  1             5             10            15
Leu Ile His Ala Pro Phe Cys Cys Ser Pro Leu His Ser Trp Gln Pro
      20             25            30
Leu His Ser Ile His Pro Phe Pro Gln Thr Trp Ala Cys Cys Tyr Gln
      35             40            45

```

Gln Gly Ala Val Met Asp Pro Ser Gln Gly Pro Leu Ile Pro Arg Ala  
 50 55 60  
 Ser Leu Ser Leu Gly Ser Ser Ser Gln His Cys Trp Ser Gly Gly Thr  
 65 70 75 80  
 His Thr His Ile Phe Pro Lys Cys Tyr Gln Cys Tyr Gly Val Ile Arg  
 85 90 95  
 Asn Phe Ile Tyr Leu Phe Phe Ala Asn Met Ile Ala Ile Lys Leu Pro  
 100 105 110  
 His Leu Tyr  
 115

<210> 3549

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3549

Met Ala Ser Pro Asp Pro Pro Ala Thr Ser Tyr Ala Pro Ser Asp Val  
 1 5 10 15  
 Pro Ser Gly Val Ala Leu Phe Leu Thr Ile Pro Phe Ala Phe Phe Leu  
 20 25 30  
 Pro Glu Leu Ile Phe Gly Phe Leu Val Trp Thr Met Val Ala Ala Thr  
 35 40 45  
 His Ile Val Tyr Pro Leu Leu Gln Gly Trp Val Met Tyr Val Ser Leu  
 50 55 60  
 Thr Ser Phe Leu Ile Ser Leu Met Phe Leu Leu Ser Tyr Leu Phe Gly  
 65 70 75 80  
 Phe Tyr Lys Arg Phe Glu Ser Trp Arg Val Leu Asp Ser Leu Tyr His  
 85 90 95  
 Gly Thr Thr Gly Ile Leu Tyr Met Ser Ala Ala Val Leu Gln Val His  
 100 105 110  
 Ala Thr Ile Val Ser Glu Lys Leu Leu Asp Pro Arg Ile Tyr Tyr Ile  
 115 120 125  
 Asn Ser Ala Ala Ser Phe Phe Ala Phe Ile Ala Thr Leu Leu Tyr Ile

130 135 140  
 Leu His Ala Phe Ser Ile Tyr Tyr His  
 145 150

<210> 3550  
 <211> 127  
 <212> PRT  
 <213> Homo sapiens

<400> 3550  
 Met Val Cys Asp Phe Thr Pro Leu Cys Leu Ile Ile Cys Gln Gln Thr  
 1 5 10 15  
 Tyr Trp Ala Lys His Lys Trp Leu Arg His Ser Trp Pro Ile Ser Cys  
 20 25 30  
 His Arg Cys His Pro Gln Arg Gln Thr Leu Gly Asn Asn Leu Gly Thr  
 35 40 45  
 Ala Ser Ser Pro Cys Gln Val Met Ala Ser Ser Ala Ser Gln His Val  
 50 55 60  
 Pro Gly Leu Pro Leu Gly Ala Gly Phe Ser Ala Gly Leu Arg Asp Ser  
 65 70 75 80  
 Trp Lys Glu Pro Gln Gly Lys Val Arg Arg Ser Ser Trp Tyr Arg Leu  
 85 90 95  
 Met Thr Lys Glu Arg Thr Arg Lys Ala Ala Trp Val Trp Trp Lys Phe  
 100 105 110  
 Gln Cys Asn Val Ile Pro Ser Arg His Ile Cys Asp Ser Leu Lys  
 115 120 125

<210> 3551  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 3551  
 Met Phe Thr Glu Tyr Gln Ala Leu Lys Gly Gln Asn His Pro Pro Thr

1                    5                    10                    15  
 Gly Pro Ala Leu Gly Pro Gly His Pro Ala Gly Ala Gly Cys Ala Glu  
                   20                    25                    30  
 Arg His Ala Glu Val Arg Ala Gly Ala Asp Arg Glu Cys Phe Gly Glu  
                   35                    40                    45  
 Ala Pro Leu Tyr Pro Asn Thr Cys Cys Ile Val Cys Val Ser Leu Asn  
                   50                    55                    60  
 Arg Val Thr Ala Ala Gly Val Val Leu Tyr Arg Glu Pro Cys Pro Arg  
                   65                    70                    75                    80  
 Ala Leu Ser Phe Pro Phe Leu His Phe Leu Phe Tyr Ala Gln Phe Ser  
                   85                    90                    95  
 Ser Leu Gly Thr Val Leu Leu Phe Phe Ser Phe Ser Phe Pro His Leu  
                   100                    105                    110  
 Ile Ile Phe Ile Pro  
                   115

<210> 3552

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3552

Met Ile Cys Tyr Ser Leu Gly Leu Gln Pro Pro Leu Leu Pro Gln His  
 1                    5                    10                    15  
 Val Leu Cys Thr Val Ala Ile Leu Ser Ser Phe Gly Ser Ala Pro Ile  
                   20                    25                    30  
 Val Cys Ser Leu Lys Phe Leu Ala Pro Leu Ser Met Ser Ser Val Phe  
                   35                    40                    45  
 Arg Met Pro Phe Ser Ile Ser Ser Tyr Leu Cys Pro Ala Thr Leu His  
                   50                    55                    60  
 Leu Thr Ser Pro Leu Phe Lys Leu Phe Ile Ser Pro Phe Leu Thr Leu  
                   65                    70                    75                    80  
 Leu Gly Phe Ser Leu Arg Pro Lys Ser Phe Leu Gln Val Leu Pro Lys  
                   85                    90                    95  
 Pro Pro Lys Ser Gln Leu Ile

100

&lt;210&gt; 3553

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3553

Met Pro Ser Ser Val Ala Gly Glu Thr Ser Val Leu Ala Val Pro Ser  
 1 5 10 15  
 Trp Arg Asp His Ser Val Glu Pro Leu Arg Asp Pro Asn Pro Ser Asp  
 20 25 30  
 Leu Leu Glu Asn Leu Asp Asp Ser Val Phe Ser Lys Arg His Ala Lys  
 35 40 45  
 Leu Glu Leu Asp Glu Lys Arg Arg Lys Arg Trp Asp Ile Gln Arg Ile  
 50 55 60  
 Arg Glu Gln Arg Ile Leu Gln Arg Leu Gln Leu Arg Met Tyr Lys Lys  
 65 70 75 80  
 Lys Gly Ile Gln Glu Ser Glu Pro Glu Val Thr Ser Phe Phe Pro Glu  
 85 90 95  
 Pro Asp Asp Val Glu Ser Leu Met Ile Thr Pro Phe Leu Pro Val Val  
 100 105 110  
 Ala Phe Gly Arg Pro Leu Pro Lys Leu Thr Pro Gln Asn Phe Glu Leu  
 115 120 125  
 Pro Trp Leu Asp Glu Arg Ser Arg Cys Arg Leu Glu Ile Gln Lys Lys  
 130 135 140  
 Gln Thr Pro His Arg Thr Cys Arg Lys  
 145 150

&lt;210&gt; 3554

&lt;211&gt; 1099

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3554

Met Leu Arg Ser Asp Ser Glu Asn Ile Leu Thr Asn Tyr Glu Asn Gln  
 1 5 10 15  
 Ser Arg Val Glu Thr Asn Glu Arg Ala Asn Glu Cys Ser His Ser Lys  
 20 25 30  
 Asn Ile Gln Asn Phe Pro Ser Asp Leu Ile Glu Asn Pro Ile Met Lys  
 35 40 45  
 Ser Lys Met Ser Lys Phe Tyr Gly Val Asn Glu Thr Glu Asn Glu Asp  
 50 55 60  
 Asn Thr Asn Arg Asp Ser Pro Ile Phe Asp Tyr Ser Pro Arg Leu Ser  
 65 70 75 80  
 Ala Leu Leu Ser His Asp Lys Leu Met His Ser Gln Gly Ser Phe Asn  
 85 90 95  
 Asp Thr His Thr Pro Glu Ser Asn Gly Asn Lys Cys Glu Ala Pro Ala  
 100 105 110  
 Leu Ser Phe Ser Asp Lys Thr Met Leu Ser Gly Gln Arg Ile Gly Glu  
 115 120 125  
 Lys Phe Gln Asp Gln Phe Leu Gly Ile Ala Ala Ile Asn Ile Ser Leu  
 130 135 140  
 Pro Gly Glu Gln Tyr Gly Gln Lys Ser Leu Asn Met Ile Ser Ser Asn  
 145 150 155 160  
 Pro Gln Val Gln Tyr His Asn Asp Lys Tyr Ile Ser Asn Thr Ser Gly  
 165 170 175  
 Glu Asp Glu Lys Thr His Pro Gly Phe Gln Gln Met Pro Glu Asp Lys  
 180 185 190  
 Glu Asp Glu Ser Glu Ile Glu Glu Tyr Ser Cys Ala Val Thr Pro Gly  
 195 200 205  
 Gly Asp Thr Asp Asn Ala Ile Val Ser Leu Thr Cys Ala Thr Pro Leu  
 210 215 220  
 Leu Asp Glu Thr Ile Ser Ala Ser Asp Tyr Glu Thr Ser Leu Leu Asn  
 225 230 235 240  
 Asp Gln Gln Asn Asn Thr Gly Thr Asp Thr Asp Ser Asp Asp Phe  
 245 250 255  
 Tyr Asp Thr Pro Leu Phe Glu Asp Asp Asp His Asp Ser Leu Leu Leu  
 260 265 270  
 Asp Gly Asp Asp Arg Asp Cys Leu His Pro Glu Asp Tyr Asp Thr Leu

275	280	285
Gln Glu Glu Asn Asp Glu Thr Ala Ser Pro Ala Asp Val Phe Tyr Asp		
290	295	300
Val Ser Lys Glu Asn Glu Asn Ser Met Val Pro Gln Gly Ala Pro Val		
305	310	315
Gly Ser Leu Ser Val Lys Asn Lys Ala His Cys Leu Gln Asp Phe Leu		
325	330	335
Met Asp Val Glu Lys Asp Glu Leu Asp Ser Gly Glu Lys Ile His Leu		
340	345	350
Asn Pro Val Gly Ser Asp Lys Val Asn Gly Gln Ser Leu Glu Thr Gly		
355	360	365
Ser Glu Arg Glu Cys Thr Asn Ile Leu Glu Gly Asp Glu Ser Asp Ser		
370	375	380
Leu Thr Asp Tyr Asp Ile Val Gly Gly Lys Glu Ser Phe Thr Ala Ser		
385	390	395
Leu Lys Phe Asp Asp Ser Gly Ser Trp Arg Gly Arg Lys Glu Glu Tyr		
405	410	415
Val Thr Gly Gln Glu Phe His Ser Asp Thr Asp His Leu Asp Ser Met		
420	425	430
Gln Ser Glu Glu Ser Tyr Gly Asp Tyr Ile Tyr Asp Ser Asn Asp Gln		
435	440	445
Asp Asp Asp Asp Asp Asp Gly Ile Asp Glu Glu Gly Gly Gly Ile Arg		
450	455	460
Asp Glu Asn Gly Lys Pro Arg Cys Gln Asn Val Ala Glu Asp Met Asp		
465	470	475
Ile Gln Leu Cys Ala Ser Ile Leu Asn Glu Asn Ser Asp Glu Asn Glu		
485	490	495
Asn Ile Asn Thr Met Ile Leu Leu Asp Lys Val His Ser Cys Ser Ser		
500	505	510
Leu Glu Lys Gln Gln Arg Val Asn Val Val Gln Leu Ala Ser Pro Ser		
515	520	525
Glu Asn Asn Leu Val Thr Glu Lys Ser Asn Leu Pro Glu Tyr Thr Thr		
530	535	540
Glu Ile Ala Gly Lys Ser Lys Glu Asn Leu Leu Asn His Glu Met Val		
545	550	555
Leu Lys Asp Val Leu Pro Pro Ile Ile Lys Asp Thr Glu Ser Glu Lys		



	565		570		575
Thr Phe Gly Pro Ala Ser Ile Ser His Asp Asn Asn Asn Ile Ser Ser					
	580		585		590
Thr Ser Glu Leu Gly Thr Asp Leu Ala Asn Thr Lys Val Lys Leu Ile					
	595		600		605
Gln Gly Ser Glu Leu Pro Glu Leu Thr Asp Ser Val Lys Gly Lys Asp					
	610		615		620
Glu Tyr Phe Lys Asn Met Thr Pro Lys Val Asp Ser Ser Leu Asp His					
625		630		635	640
Ile Ile Cys Thr Glu Pro Asp Leu Ile Gly Lys Pro Ala Glu Glu Ser					
	645		650		655
His Leu Ser Leu Ile Ala Ser Val Thr Asp Lys Asp Pro Gln Gly Asn					
	660		665		670
Gly Ser Asp Leu Ile Lys Gly Arg Asp Gly Lys Ser Asp Ile Leu Ile					
	675		680		685
Glu Asp Glu Thr Ser Ile Gln Lys Met Tyr Leu Gly Glu Gly Glu Val					
	690		695		700
Leu Val Glu Gly Leu Val Glu Glu Glu Asn Arg His Leu Lys Leu Leu					
705		710		715	720
Pro Gly Lys Asn Thr Arg Asp Ser Phe Lys Leu Ile Asn Ser Gln Phe					
	725		730		735
Pro Phe Pro Gln Ile Thr Asn Asn Glu Glu Leu Asn Gln Lys Gly Ser					
	740		745		750
Leu Lys Lys Ala Thr Val Thr Leu Lys Asp Glu Pro Asn Asn Leu Gln					
	755		760		765
Ile Ile Val Ser Lys Ser Pro Val Gln Phe Glu Asn Leu Glu Glu Ile					
	770		775		780
Phe Asp Thr Ser Val Ser Lys Glu Ile Ser Asp Asp Ile Thr Ser Asp					
785		790		795	800
Ile Thr Ser Trp Glu Gly Asn Thr His Phe Glu Glu Ser Phe Thr Asp					
	805		810		815
Gly Pro Glu Lys Glu Leu Asp Leu Phe Thr Tyr Leu Lys His Cys Ala					
	820		825		830
Lys Asn Ile Lys Ala Lys Asp Val Ala Lys Pro Asn Glu Asp Val Pro					
	835		840		845
Ser His Val Leu Ile Thr Ala Pro Pro Met Lys Glu His Leu Gln Leu					

850	855	860
Gly Val Asn Asn Thr Lys Glu Lys Ser Thr Ser Thr Gln Lys Asp Ser		
865	870	875
Pro Leu Asn Asp Met Ile Gln Ser Asn Asp Leu Cys Ser Lys Glu Ser		
885	890	895
Ile Ser Gly Gly Gly Thr Glu Ile Ser Gln Phe Thr Pro Glu Ser Ile		
900	905	910
Glu Ala Thr Leu Ser Ile Leu Ser Arg Lys His Val Glu Asp Val Gly		
915	920	925
Lys Asn Asp Phe Leu Gln Ser Glu Arg Cys Ala Asn Gly Leu Gly Asn		
930	935	940
Asp Asn Ser Ser Asn Thr Leu Asn Thr Asp Tyr Ser Phe Leu Glu Ile		
945	950	955
Asn Asn Lys Lys Glu Arg Ile Glu Gln Gln Leu Pro Lys Glu Gln Ala		
965	970	975
Leu Ser Pro Arg Ser Gln Glu Lys Glu Val Gln Ile Pro Glu Leu Ser		
980	985	990
Gln Val Phe Val Glu Asp Val Lys Asp Ile Leu Lys Ser Arg Leu Lys		
995	1000	1005
Glu Gly His Met Lys Pro Gln Glu Val Glu Glu Pro Ser Ala Cys Ala		
1010	1015	1020
Asp Thr Lys Ile Leu Ile Gln Asn Leu Ile Lys Arg Ile Thr Thr Ser		
1025	1030	1035
Gln Leu Val Asn Glu Ala Ser Thr Val Pro Ser Asp Ser Gln Met Ser		
1045	1050	1055
Asp Ser Ser Gly Val Ser Pro Met Thr Asn Ser Ser Glu Leu Lys Pro		
1060	1065	1070
Glu Ser Arg Asp Asp Pro Phe Cys Ile Gly Asn Leu Lys Ser Glu Leu		
1075	1080	1085
Leu Leu Asn Ile Leu Lys Gln Asp Gln His Ser		
1090	1095	

&lt;210&gt; 3555

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3555

Met Gln Gln Thr Ala Pro Asn Thr Leu Pro Thr Ala Ser Met Ser Ile  
 1 5 10 15  
 Ser Gly Pro Gly Tyr Ser His Ala Gly Pro Ala Ser Gln Gly Val Pro  
 20 25 30  
 Met Gln Gly Gln Gly Thr Ile Gly Asn Tyr Val Ser Arg Thr Asn Ile  
 35 40 45  
 Asn Met Gln Ser Asn Pro Val Ser Met Met Gln Gln Gln Ala Ala Thr  
 50 55 60  
 Ser His Tyr Ser Ser Ala Gln Gly Gly Ser Gln His Tyr Gln Gly Gln  
 65 70 75 80  
 Ser Ser Ile Ala Met Met Gly Gln Gly Ser Gln Gly Ser Ser Met Met  
 85 90 95  
 Gly Gln Arg Pro Met Ala Pro Tyr Arg Pro Ser Gln Gln Gly Ser Ser  
 100 105 110  
 Gln Gln Tyr Leu Gly Gln Glu Glu Tyr Tyr Gly Glu Gln Tyr Ser His  
 115 120 125  
 Ser Gln Gly Ala Ala Glu Pro Met Gly Gln Gln Tyr Tyr Pro Asp Gly  
 130 135 140  
 His Gly Asp Tyr Ala Tyr Gln Gln Ser Ser Tyr Thr Glu Gln Ser Tyr  
 145 150 155 160  
 Asp Arg Ser Phe Glu Glu Ser Thr Gln His Tyr Tyr Glu Gly Gly Asn  
 165 170 175  
 Ser Gln Tyr Ser Gln Gln Gln Ala Gly Tyr Gln Gln Gly Ala Ala Gln  
 180 185 190  
 Gln Gln Thr Tyr Ser Gln Gln Gln Tyr Pro Ser Gln Gln Ser Tyr Pro  
 195 200 205  
 Gly Gln Gln Gln Gly Tyr Gly Ser Ala Gln Gly Ala Pro Ser Gln Tyr  
 210 215 220  
 Pro Gly Tyr Gln Gln Gly Gln Gly Gln Gln Tyr Gly Ser Tyr Arg Ala  
 225 230 235 240  
 Pro Gln Thr Ala Pro Ser Ala Gln Gln Gln Arg Pro Tyr Gly Tyr Glu  
 245 250 255  
 Gln Gly Gln Tyr Gly Asn Tyr Gln Gln

260

265

&lt;210&gt; 3556

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3556

```

Met Phe Ser Tyr Glu Lys Tyr Thr Leu Phe Ile Leu Ser Ser Ser Phe
  1             5             10            15
Phe Phe Phe Phe Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly Val
      20             25            30
Gln Trp Arg Asn Leu Ser Ser Leu Gln Pro Leu Pro Pro Gly Phe Lys
      35             40            45
Arg Phe Ser Cys Ser Ser Leu Pro Tyr Ser Trp Asp Tyr Arg Cys Leu
      50             55            60
Pro Pro Cys Pro Ala Asn Phe Cys Val Phe Ser Arg Asp Gly Val Ser
      65             70            75            80
Pro His Arg Pro Gly Ser Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro
      85             90            95
Thr Leu Ala Ser Leu Asn Thr Gly Ile Thr Gly Val Ser His Cys Ile
      100            105            110
Arg Pro His Phe Val Phe Phe Asn Ser Val Ile Gly Ile Ser Phe Phe
      115            120            125
Phe Phe Phe Asn Val
      130

```

&lt;210&gt; 3557

&lt;211&gt; 309

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

```

Met Ser Ser Cys Gln Gly Ser Leu His Gly Pro Arg Arg Pro Gln Pro

```

1	5	10	15
Gly Ala Ser Gly Arg Ser Thr His Thr Asp Gly Gly Gly Ser Ser Pro			
20	25	30	
Ala Gly Glu Gln Glu Pro Ser Gln His Arg Thr Gly Ala Ala Val Gln			
35	40	45	
Arg Lys Pro Trp Pro Ser Gly Gly Leu Trp Arg Gln Asp Gln Gln Pro			
50	55	60	
Gly Pro Gly Glu Ala Pro His Thr Gln Ala Phe Gly Glu Trp Pro Trp			
65	70	75	80
Gly Gln Glu Leu Gly Ser Arg Ala Pro Gly Leu Gly Gly Asp Ala Gly			
85	90	95	
Ser Pro Ala Pro Pro Phe His Ser Ser Ser Tyr Arg Ile Ser Leu Ala			
100	105	110	
Gly Val Glu Pro Ser Leu Val Gln Ala Ala Leu Gly Gln Leu Val Arg			
115	120	125	
Leu Ser Cys Ser Asp Asp Thr Ala Pro Glu Ser Gln Ala Ala Trp Gln			
130	135	140	
Lys Asp Gly Gln Pro Ile Ser Ser Asp Arg His Arg Leu Gln Phe Asp			
145	150	155	160
Gly Ser Leu Ile Ile His Pro Leu Gln Ala Glu Asp Ala Gly Thr Tyr			
165	170	175	
Ser Cys Gly Ser Thr Arg Pro Gly Arg Asp Ser Gln Lys Ile Gln Leu			
180	185	190	
Arg Ile Ile Gly Gly Asp Met Ala Val Leu Ser Glu Ala Glu Leu Ser			
195	200	205	
Arg Phe Pro Gln Pro Arg Asp Pro Ala Gln Asp Phe Gly Gln Ala Gly			
210	215	220	
Ala Ala Gly Pro Leu Gly Ala Ile Pro Ser Ser His Pro Gln Pro Ala			
225	230	235	240
Asn Arg Leu Arg Leu Asp Gln Asn Gln Pro Arg Val Val Asp Ala Ser			
245	250	255	
Pro Gly Gln Arg Ile Arg Met Thr Cys Arg Ala Glu Gly Phe Pro Pro			
260	265	270	
Pro Ala Ile Glu Trp Gln Arg Asp Gly Gln Pro Val Ser Ser Pro Ser			
275	280	285	
Thr His Arg Pro Ala Gln Gly Pro Trp Gln Gly Leu Arg Arg Pro Ala			

290 Arg Ala Gly Gln Leu  
305

295

300

<210> 3558

<211> 784

<212> PRT

<213> Homo sapiens

<400> 3558

Met Pro His Thr Leu Trp Met Val Trp Val Leu Gly Val Ile Ile Ser  
1 5 10 15  
Leu Ser Lys Glu Glu Ser Ser Asn Gln Ala Ser Leu Ser Cys Asp Arg  
20 25 30  
Asn Gly Ile Cys Lys Gly Ser Ser Gly Ser Leu Asn Ser Thr Pro Ser  
35 40 45  
Gly Leu Thr Glu Ala Val Lys Ser Leu Asp Leu Ser Asn Asn Arg Ile  
50 55 60  
Thr Tyr Ile Ser Asn Ser Asp Leu Gln Arg Cys Val Asn Leu Gln Ala  
65 70 75 80  
Leu Val Leu Thr Ser Asn Gly Ile Asn Thr Ile Glu Glu Asp Ser Phe  
85 90 95  
Ser Ser Leu Gly Ser Leu Glu His Leu Asp Leu Ser Tyr Asn Tyr Leu  
100 105 110  
Ser Asn Leu Ser Ser Ser Trp Phe Lys Pro Leu Ser Ser Leu Thr Phe  
115 120 125  
Leu Asn Leu Leu Gly Asn Pro Tyr Lys Thr Leu Gly Glu Thr Ser Leu  
130 135 140  
Phe Ser His Leu Thr Lys Leu Gln Ile Leu Arg Val Gly Asn Met Asp  
145 150 155 160  
Thr Phe Thr Lys Ile Gln Arg Lys Asp Phe Ala Gly Leu Thr Phe Leu  
165 170 175  
Glu Glu Leu Glu Ile Asp Ala Ser Asp Leu Gln Ser Tyr Glu Pro Lys  
180 185 190  
Ser Leu Lys Ser Ile Gln Asn Val Ser His Leu Ile Leu His Met Lys

195	200	205
Gln His Ile Leu Leu Leu Glu Ile Phe Val Asp Val Thr Ser Ser Val		
210	215	220
Glu Cys Leu Glu Leu Arg Asp Thr Asp Leu Asp Thr Phe His Phe Ser		
225	230	235
Glu Leu Ser Thr Gly Glu Thr Asn Ser Leu Ile Lys Lys Phe Thr Phe		
	245	250
Arg Asn Val Lys Ile Thr Asp Glu Ser Leu Phe Gln Val Met Lys Leu		255
	260	265
Leu Asn Gln Ile Ser Gly Leu Leu Glu Leu Glu Phe Asp Asp Cys Thr		270
	275	280
Leu Asn Gly Val Gly Asn Phe Arg Ala Ser Asp Asn Asp Arg Val Ile		285
	290	295
Asp Pro Gly Lys Val Glu Thr Leu Thr Ile Arg Arg Leu His Ile Pro		300
305	310	315
Arg Phe Tyr Leu Phe Tyr Asp Leu Ser Thr Leu Tyr Ser Leu Thr Glu		
	325	330
Arg Val Lys Arg Ile Thr Val Glu Asn Ser Lys Val Phe Leu Val Pro		335
	340	345
Cys Leu Leu Ser Gln His Leu Lys Ser Leu Glu Tyr Leu Asp Leu Ser		350
	355	360
Glu Asn Leu Met Val Glu Glu Tyr Leu Lys Asn Ser Ala Cys Glu Asp		365
	370	375
Ala Trp Pro Ser Leu Gln Thr Leu Ile Leu Arg Gln Asn His Leu Ala		380
385	390	395
Ser Leu Glu Lys Thr Gly Glu Thr Leu Leu Thr Leu Lys Asn Leu Thr		
	405	410
Asn Ile Asp Ile Ser Lys Asn Ser Phe His Ser Met Pro Glu Thr Cys		415
	420	425
Gln Trp Pro Glu Lys Met Lys Tyr Leu Asn Leu Ser Ser Thr Arg Ile		430
	435	440
His Ser Val Thr Gly Cys Ile Pro Lys Thr Leu Glu Ile Leu Asp Val		445
	450	455
Ser Asn Asn Asn Leu Asn Leu Phe Ser Leu Asn Leu Pro Gln Leu Lys		460
465	470	475
Glu Leu Tyr Ile Ser Arg Asn Lys Leu Met Thr Leu Pro Asp Ala Ser		480

	485		490		495										
Leu	Leu	Pro	Met	Leu	Leu	Val	Leu	Lys	Ile	Ser	Arg	Asn	Ala	Ile	Thr
	500							505						510	
Thr	Phe	Ser	Lys	Glu	Gln	Leu	Asp	Ser	Phe	His	Thr	Leu	Lys	Thr	Leu
	515							520						525	
Glu	Ala	Gly	Gly	Asn	Asn	Phe	Ile	Cys	Ser	Cys	Glu	Phe	Leu	Ser	Phe
	530							535						540	
Thr	Gln	Glu	Gln	Gln	Ala	Leu	Ala	Lys	Val	Leu	Ile	Asp	Trp	Pro	Ala
545								550						555	560
Asn	Tyr	Leu	Cys	Asp	Ser	Pro	Ser	His	Val	Arg	Gly	Gln	Gln	Val	Gln
								565						570	575
Asp	Val	Arg	Leu	Ser	Val	Ser	Glu	Cys	His	Arg	Thr	Ala	Leu	Val	Ser
	580							585						590	
Gly	Met	Cys	Cys	Ala	Leu	Phe	Leu	Leu	Ile	Leu	Leu	Thr	Gly	Val	Leu
	595							600						605	
Cys	His	Arg	Phe	His	Gly	Leu	Trp	Tyr	Met	Lys	Met	Met	Trp	Ala	Trp
	610							615						620	
Leu	Gln	Ala	Lys	Arg	Lys	Pro	Arg	Lys	Ala	Pro	Ser	Arg	Asn	Ile	Cys
625								630						635	640
Tyr	Asp	Ala	Phe	Val	Ser	Tyr	Ser	Glu	Arg	Asp	Ala	Tyr	Trp	Val	Glu
								645						650	655
Asn	Leu	Met	Val	Gln	Glu	Leu	Glu	Asn	Phe	Asn	Pro	Pro	Phe	Lys	Leu
	660							665						670	
Cys	Leu	His	Lys	Arg	Asp	Phe	Ile	Pro	Gly	Lys	Trp	Ile	Ile	Asp	Asn
	675							680						685	
Ile	Ile	Asp	Ser	Ile	Glu	Lys	Ser	His	Lys	Thr	Val	Phe	Val	Leu	Ser
	690							695						700	
Glu	Asn	Phe	Val	Lys	Ser	Glu	Trp	Cys	Lys	Tyr	Glu	Leu	Asp	Phe	Ser
705								710						715	720
His	Phe	Arg	Leu	Phe	Asp	Glu	Asn	Asn	Asp	Ala	Ala	Ile	Leu	Ile	Leu
								725						730	735
Leu	Glu	Pro	Ile	Glu	Lys	Lys	Ala	Ile	Pro	Gln	Arg	Phe	Cys	Lys	Leu
	740							745						750	
Arg	Lys	Ile	Met	Asn	Thr	Lys	Thr	Tyr	Leu	Glu	Trp	Pro	Met	Asp	Glu
	755							760						765	
Ala	Gln	Arg	Glu	Gly	Phe	Trp	Val	Asn	Leu	Arg	Ala	Ala	Ile	Lys	Ser



770

775

780

&lt;210&gt; 3559

&lt;211&gt; 289

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

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Met Lys Asp Arg Leu Glu Gln Leu Lys Ala Lys Gln Leu Thr Gln Asp
  1              5              10             15
Asp Asp Thr Asp Ala Val Glu Ile Ala Ile Asp Asn Thr Ala Phe Met
      20              25             30
Asp Glu Phe Phe Ser Glu Ile Glu Glu Thr Arg Leu Asn Ile Asp Lys
      35              40             45
Ile Ser Glu His Val Glu Glu Ala Lys Lys Leu Tyr Ser Ile Ile Leu
      50              55             60
Ser Ala Pro Ile Pro Glu Pro Lys Thr Lys Asp Asp Leu Glu Gln Leu
      65              70             75             80
Thr Thr Glu Ile Lys Lys Arg Ala Asn Asn Val Arg Asn Lys Leu Lys
      85              90             95
Ser Met Glu Lys His Ile Glu Glu Asp Glu Val Arg Ser Ser Ala Asp
      100             105             110
Leu Arg Ile Arg Lys Ser Gln His Ser Val Leu Ser Arg Lys Phe Val
      115             120             125
Glu Val Met Thr Lys Tyr Asn Glu Ala Gln Val Asp Phe Arg Glu Arg
      130             135             140
Ser Lys Gly Arg Ile Gln Arg Gln Leu Glu Ile Thr Gly Lys Lys Thr
      145             150             155             160
Thr Asp Glu Glu Leu Glu Glu Met Leu Glu Ser Gly Asn Pro Ala Ile
      165             170             175
Phe Thr Ser Gly Ile Ile Asp Ser Gln Ile Ser Lys Gln Ala Leu Ser
      180             185             190
Glu Ile Glu Gly Arg His Lys Asp Ile Val Arg Leu Glu Ser Ser Ile
      195             200             205
Lys Glu Leu His Asp Met Phe Met Asp Ile Ala Met Leu Val Glu Asn

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210                      215                      220  
 Gln Gly Glu Met Leu Asp Asn Ile Glu Leu Asn Val Met His Thr Val  
 225                      230                      235                      240  
 Asp His Val Glu Lys Ala Arg Asp Glu Thr Lys Lys Ala Val Lys Tyr  
                     245                      250                      255  
 Gln Ser Gln Ala Arg Lys Lys Leu Ile Ile Ile Ile Val Leu Val Val  
                     260                      265                      270  
 Val Leu Leu Gly Ile Leu Ala Leu Ile Ile Gly Leu Ser Val Gly Leu  
                     275                      280                      285  
 Asn

<210> 3560

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3560

Met Ser Ile Tyr Leu Cys Thr Tyr Met Ala Tyr Phe Ser Thr Gly Ile  
   1                      5                      10                      15  
 Gln Tyr Ile Ile Val Ala Ser Gly Leu Ser Glu Ala Ser Phe Thr His  
                     20                      25                      30  
 Ser Ile Ser Pro Leu Phe Tyr Lys Gln Ser Lys Pro Thr Leu Phe Lys  
                     35                      40                      45  
 Asn Phe Leu Leu Leu Leu Phe Leu Leu Leu Gly Arg Ser Leu Ala  
   50                      55                      60  
 Leu Ser Pro Arg Leu Glu Cys Ala Val Ser Ala His Cys Lys Leu His  
   65                      70                      75                      80  
 Phe Pro Gly Ser Arg His Phe Pro Ala Ser Ala Ser Gln Ala Ala Gly  
                     85                      90                      95  
 Thr Ala Gly Ala Arg His His Ala Arg Leu Ile Phe Cys Ile Phe Gly  
                     100                      105                      110  
 Gly Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Gln Ser Pro Asp  
                     115                      120                      125

Leu Val Ile Trp Ser Arg Ser Pro Asp Leu Met Ile Cys Leu Pro  
 130 135 140

<210> 3561

<211> 1229

<212> PRT

<213> Homo sapiens

<400> 3561

Met Met Leu Asn Gly Ala Asp Ala Val His Phe Arg Val Leu Met Lys  
 1 5 10 15  
 Leu Phe Ile Lys Val His Leu Glu Asp Val Phe Gln Leu Phe Lys Phe  
 20 25 30  
 Cys Ser Val Leu Trp Thr Tyr Gly Ser Ser Leu Ser Asn Pro Leu Asn  
 35 40 45  
 Cys Ser Val Lys Thr Val Leu Gln Thr Gln Ala Leu Tyr Val Gly Cys  
 50 55 60  
 Ala Met Leu Ser Ser Gln Lys Thr Gln Cys Lys His Gln Leu Ala Ser  
 65 70 75 80  
 Ile Ser Ser Pro Val Val Thr Ser Leu Leu Ile Asn Leu Gly Ser Pro  
 85 90 95  
 Val Lys Glu Val Arg Arg Ala Ala Ile Gln Cys Leu Gln Ala Leu Ser  
 100 105 110  
 Gly Val Ala Ser Pro Phe Tyr Leu Ile Ile Asp His Leu Ile Ser Lys  
 115 120 125  
 Ala Glu Glu Ile Thr Ser Asp Ala Ala Tyr Val Ile Gln Asp Leu Ala  
 130 135 140  
 Thr Leu Phe Glu Glu Leu Gln Arg Glu Lys Lys Leu Lys Ser His Gln  
 145 150 155 160  
 Lys Leu Ser Glu Thr Leu Lys Asn Leu Leu Ser Cys Val Tyr Ser Cys  
 165 170 175  
 Pro Ser Tyr Ile Ala Lys Asp Leu Met Lys Val Leu Gln Gly Val Asn  
 180 185 190  
 Gly Glu Ile Thr Lys Pro Phe Phe Ala Ala Ile Ser Asp Glu Lys Val  
 195 200 205

Gln Gln Lys Leu Leu Arg Met Leu Phe Asp Leu Leu Val Asn Cys Lys  
 210 215 220  
 Asn Ser His Cys Ala Gln Thr Val Ser Ser Val Phe Lys Gly Ile Ser  
 225 230 235 240  
 Val Asn Ala Glu Gln Val Arg Ile Glu Leu Glu Pro Pro Asp Lys Ala  
 245 250 255  
 Lys Pro Leu Gly Thr Val Gln Gln Lys Arg Arg Gln Lys Met Gln Gln  
 260 265 270  
 Lys Lys Ser Gln Asp Leu Glu Ser Val Gln Glu Val Gly Gly Ser Tyr  
 275 280 285  
 Trp Gln Arg Val Thr Leu Ile Leu Glu Leu Leu Gln His Lys Lys Lys  
 290 295 300  
 Leu Arg Ser Pro Gln Ile Leu Val Pro Thr Leu Phe Asn Leu Leu Ser  
 305 310 315 320  
 Arg Cys Leu Glu Pro Leu Pro Gln Glu Gln Gly Asn Met Glu Tyr Thr  
 325 330 335  
 Lys Gln Leu Ile Leu Ser Cys Leu Leu Asn Ile Cys Gln Lys Leu Ser  
 340 345 350  
 Pro Asp Gly Gly Lys Ile Pro Lys Asp Ile Leu Asp Glu Glu Lys Phe  
 355 360 365  
 Asn Val Glu Leu Ile Val Gln Cys Ile Arg Leu Ser Glu Met Pro Gln  
 370 375 380  
 Thr His His His Ala Leu Leu Leu Leu Gly Thr Val Ala Gly Ile Phe  
 385 390 395 400  
 Pro Asp Lys Val Leu His Asn Ile Met Ser Ile Phe Thr Phe Met Gly  
 405 410 415  
 Ala Asn Val Met Arg Leu Asp Asp Thr Tyr Ser Phe Gln Val Ile Asn  
 420 425 430  
 Lys Thr Val Lys Met Val Ile Pro Ala Leu Ile Gln Ser Asp Ser Gly  
 435 440 445  
 Asp Ser Ile Glu Val Ser Arg Asn Val Glu Glu Ile Val Val Lys Ile  
 450 455 460  
 Ile Ser Val Phe Val Asp Ala Leu Pro His Val Pro Glu His Arg Arg  
 465 470 475 480  
 Leu Pro Ile Leu Val Gln Leu Val Asp Thr Leu Gly Ala Glu Lys Phe  
 485 490 495

Leu Trp Ile Leu Leu Ile Leu Leu Phe Glu Gln Tyr Val Thr Lys Thr  
 500 505 510  
 Val Leu Ala Ala Ala Tyr Gly Glu Lys Asp Ala Ile Leu Glu Ala Asp  
 515 520 525  
 Thr Glu Phe Trp Phe Ser Val Cys Cys Glu Phe Ser Val Gln His Gln  
 530 535 540  
 Ile Gln Ser Leu Met Asn Ile Leu Gln Tyr Leu Leu Lys Leu Pro Glu  
 545 550 555 560  
 Glu Lys Glu Glu Thr Ile Pro Lys Ala Val Ser Phe Asn Lys Ser Glu  
 565 570 575  
 Ser Gln Glu Glu Met Leu Gln Val Phe Asn Val Glu Thr His Thr Ser  
 580 585 590  
 Lys Gln Leu Arg His Phe Lys Phe Leu Ser Val Ser Phe Met Ser Gln  
 595 600 605  
 Leu Leu Ser Ser Asn Asn Phe Leu Lys Lys Val Val Glu Ser Gly Gly  
 610 615 620  
 Pro Glu Ile Leu Lys Gly Leu Glu Glu Arg Leu Leu Glu Thr Val Leu  
 625 630 635 640  
 Gly Tyr Ile Ser Ala Val Ala Gln Ser Met Glu Arg Asn Ala Asp Lys  
 645 650 655  
 Leu Thr Val Lys Phe Trp Arg Ala Leu Leu Ser Lys Ala Tyr Asp Leu  
 660 665 670  
 Leu Asp Lys Val Asn Ala Leu Leu Pro Thr Glu Thr Phe Ile Pro Val  
 675 680 685  
 Ile Arg Gly Leu Val Gly Asn Pro Leu Pro Ser Val Arg Arg Lys Ala  
 690 695 700  
 Leu Asp Leu Leu Asn Asn Lys Leu Gln Gln Asn Ile Ser Trp Lys Lys  
 705 710 715 720  
 Thr Ile Val Thr Arg Phe Leu Lys Leu Val Pro Asp Leu Leu Ala Ile  
 725 730 735  
 Val Gln Arg Lys Lys Lys Glu Gly Glu Glu Glu Gln Ala Ile Asn Arg  
 740 745 750  
 Gln Thr Ala Leu Tyr Thr Leu Lys Leu Leu Cys Lys Asn Phe Gly Ala  
 755 760 765  
 Glu Asn Pro Asp Pro Phe Val Pro Val Leu Asn Thr Ala Val Lys Leu  
 770 775 780

Ile Ala Pro Glu Arg Lys Glu Glu Lys Asn Val Leu Gly Ser Ala Leu  
 785 790 795 800  
 Leu Cys Ile Ala Glu Val Thr Ser Thr Leu Glu Ala Leu Ala Ile Pro  
 805 810 815  
 Gln Leu Pro Ser Leu Met Pro Pro Leu Leu Thr Thr Met Lys Asn Thr  
 820 825 830  
 Ser Glu Leu Val Ser Ser Glu Val Tyr Leu Leu Ser Ala Leu Ala Ala  
 835 840 845  
 Leu Gln Lys Val Val Glu Thr Leu Pro His Phe Ile Ser Pro Tyr Leu  
 850 855 860  
 Glu Gly Ile Leu Ser Gln Val Ile His Leu Glu Lys Ile Thr Ser Glu  
 865 870 875 880  
 Met Gly Ser Ala Ser Gln Ala Asn Ile Arg Leu Thr Ser Leu Lys Lys  
 885 890 895  
 Thr Leu Ala Thr Thr Leu Ala Pro Arg Val Leu Leu Pro Ala Ile Lys  
 900 905 910  
 Lys Thr Tyr Lys Gln Ile Glu Lys Asn Trp Lys Asn His Met Gly Pro  
 915 920 925  
 Phe Met Gly Ile Leu Gln Glu His Ile Gly Val Met Lys Lys Glu Glu  
 930 935 940  
 Leu Thr Ser His Gln Ser Gln Leu Thr Ala Phe Phe Leu Glu Ala Leu  
 945 950 955 960  
 Asp Phe Arg Ala Gln His Ser Glu Asn Asp Leu Glu Glu Val Gly Lys  
 965 970 975  
 Thr Glu Asn Cys Ile Ile Asp Cys Leu Val Ala Met Val Val Lys Leu  
 980 985 990  
 Ser Glu Val Thr Phe Arg Pro Leu Phe Phe Lys Leu Phe Asp Trp Ala  
 995 1000 1005  
 Lys Thr Glu Asp Ala Pro Lys Asp Arg Leu Leu Thr Phe Tyr Asn Leu  
 1010 1015 1020  
 Ala Asp Cys Ile Ala Glu Lys Leu Lys Gly Leu Phe Thr Leu Phe Ala  
 1025 1030 1035 1040  
 Gly His Leu Val Lys Pro Phe Ala Asp Thr Leu Asn Gln Val Asn Ile  
 1045 1050 1055  
 Ser Lys Thr Asp Glu Ala Phe Phe Asp Ser Glu Asn Asp Pro Glu Lys  
 1060 1065 1070

Cys Cys Leu Leu Leu Gln Phe Ile Leu Asn Cys Leu Tyr Lys Ile Phe  
 1075 1080 1085  
 Leu Phe Asp Thr Gln His Phe Ile Ser Lys Glu Arg Ala Glu Ala Leu  
 1090 1095 1100  
 Met Met Pro Leu Val Asp Gln Leu Glu Asn Arg Leu Gly Gly Glu Glu  
 1105 1110 1115 1120  
 Lys Phe Gln Glu Arg Val Thr Lys His Leu Ile Pro Cys Ile Ala Gln  
 1125 1130 1135  
 Phe Ser Val Ala Met Ala Asp Asp Ser Leu Trp Lys Pro Leu Asn Tyr  
 1140 1145 1150  
 Gln Ile Leu Leu Lys Thr Arg Asp Ser Ser Pro Lys Val Arg Phe Ala  
 1155 1160 1165  
 Ala Leu Ile Thr Val Leu Ala Leu Ala Glu Lys Leu Lys Glu Asn Tyr  
 1170 1175 1180  
 Ile Val Leu Leu Pro Glu Ser Ile Pro Phe Leu Ala Glu Leu Met Glu  
 1185 1190 1195 1200  
 Asp Glu Cys Glu Glu Val Glu His Gln Cys Gln Lys Thr Ile Gln Gln  
 1205 1210 1215  
 Leu Glu Thr Val Leu Gly Glu Pro Leu Gln Ser Tyr Phe  
 1220 1225

<210> 3562

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3562

Met Ser Arg Arg Arg Glu Glu Thr His Cys Trp Lys Lys Gln Pro Met  
 1 5 10 15  
 Thr Ala Pro Leu Pro Gly Thr Arg Pro His Pro Leu Pro Ala Pro Leu  
 20 25 30  
 Pro Gly Val Gln Pro Lys Arg Thr Tyr Val Leu Thr Pro Leu Lys Pro  
 35 40 45  
 Leu Val Leu Ser Pro Gln Glu Thr Trp Leu Cys Val Cys Glu Trp Leu  
 50 55 60

Thr Phe Leu His Pro Leu Val Leu Pro Phe Pro Ser Arg Gly Thr Glu  
 65                                70                                75                                80  
 Arg Gln Gly Arg Ile His Val Pro Ile Val Glu Ala Glu Lys Arg Glu  
                                   85                                90                                95  
 Ser Val Leu Tyr Thr Val Leu Ile  
                                   100

<210> 3563

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3563

Met Leu Arg Ala Phe Leu Phe Leu Ser Leu Phe Pro His Ser Gln Val  
   1                                5                                10                                15  
 Leu Val Tyr Glu Leu Leu Leu Gly Lys Gly Phe Arg Gly Gly Gly Gly  
                                   20                                25                                30  
 Arg Trp Lys Ala Leu Leu Gly Arg His Gln Ala Arg Leu Lys Ala Glu  
                                   35                                40                                45  
 Leu Ala Arg Leu Lys Val His Arg Gly Val Ser Arg Asn Glu Asp Leu  
                                   50                                55                                60  
 Leu Glu Val Gly Ser Arg Pro Gly Pro Ala Ser Gln Leu Pro Arg Phe  
   65                                70                                75                                80  
 Val Arg Val Asn Thr Leu Lys Thr Cys Ser Asp Asp Val Val Asp Tyr  
                                   85                                90                                95  
 Phe Lys Arg Gln Gly Phe Ser Tyr Gln Gly Arg Ala Ser Ser Leu Asp  
                                   100                                105                                110  
 Asp Leu Arg Ala Leu Lys Gly Lys His Phe Leu Leu Asp Pro Leu Met  
                                   115                                120                                125  
 Pro Glu Leu Leu Val Phe Pro Ala Gln Thr Asp Leu His Glu His Pro  
                                   130                                135                                140  
  
 Leu Tyr Arg Ala Gly His Leu Ile Leu Gln Asp Arg Ala Ser Cys Leu  
   145                                150                                155                                160  
 Pro Ala Met Leu Leu Asp Pro Pro Pro Gly Ser His Val Ile Asp Ala



165								170				175			
Cys	Ala	Ala	Pro	Gly	Asn	Lys	Thr	Ser	His	Leu	Ala	Ala	Leu	Leu	Lys
180								185				190			
Asn	Gln	Gly	Ser	Leu	Pro	Leu	Thr	Trp	Met	Pro	Ser	Gly	Trp	His	Pro
195								200				205			
Trp	Pro	Arg	Cys	Trp	Pro	Gly	Leu	Ala	Ser	Leu	Ala	Val	Asn	Trp	Leu
210								215				220			
Arg	Arg	Thr	Ser	Trp	Arg	Ser	Pro	Pro	Arg	Ile	His	Ala	Thr	Met	Arg
225								230				240			
Ser	Thr	Thr	Ser	Cys	Trp	Ile	Leu	Pro	Ala	Val	Ala	Arg	Val	Cys	Arg
245								250				255			
Ala	Asp	Ser	Trp	Arg	Ser	Pro	Gly	Gln	Ala	His	Leu	Ala	Arg	Cys	Val
260								265				270			
Cys	Met	Pro	Trp	Gln	Gly	Ser	Ser	Ser	Glu	Pro	Cys	Ala	Thr	Arg	Ser
275								280				285			
Leu	Ser	Leu	Pro	Cys	Ser	Gly	Ser	Ser	Thr	Pro	Arg	Ala	Pro	Ser	Ala
290								295				300			
Arg	Arg	Arg	Met	Lys	Thr	Trp	Cys	Glu	Met	Arg	Cys	Ser	Arg	Thr	Arg
305								310				320			
Ala Pro Ser Gly															

&lt;210&gt; 3564

<211> 130

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3564

Met	Val	Ser	Val	Arg	Gly	Gln	Cys	Pro	Arg	Gly	Gly	Phe	Trp	Leu	Glu
1				5				10						15	
Pro	Ser	Val	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Ala	Val	Asn	Ser	Gly	Val
			20					25					30		
Cys	Arg	Pro	Gly	Gly	His	Arg	Gly	Arg	Ser	Ser	Ala	Leu	Gly	Pro	Leu
		35					40					45			

Cys Gly Ser Trp Thr Arg Ser Arg Glu Pro Gln Arg Pro Val Pro Ser  
           50                          55                          60  
 Pro Arg Gly Asp Leu Gly Pro Arg Pro Trp Ser Pro Leu Trp Ala Ala  
       65                          70                          75                          80  
 Leu Arg Pro Gln Pro Arg Val Ser Pro Asp Cys Ser Val Thr Ala Gly  
                           85                          90                          95  
 Gly Ser Trp Gly Asp Pro Ile Ser Val Cys Gly Val Cys Ala Phe Lys  
                           100                          105                          110  
 Lys Pro Leu Gly Trp Lys Pro Tyr Asp Glu Ser Thr Gly Ala Phe Pro  
           115                          120                          125  
 His Leu  
       130

<210> 3565

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3565

Met Ser Leu Thr Phe Arg Arg Pro Lys Thr Leu Arg Leu Arg Arg Gln  
       1                          5                          10                          15  
 Pro Arg Tyr Pro Arg Lys Ser Thr Pro Thr Arg Asn Lys Leu Gly His  
                           20                          25                          30  
 Tyr Ala Ile Ile Lys Phe Pro Leu Ala Thr Glu Ser Ala Val Lys Lys  
                           35                          40                          45  
 Ile Glu Glu Asn Asn Thr Leu Val Phe Thr Val Asp Val Lys Asp Asn  
           50                          55                          60  
 Lys His Gln Ile Arg Gln Ala Val Lys Lys Val Tyr Asp Ser Asp Val  
       65                          70                          75                          80  
 Ala Lys Val Thr Thr Leu Ile Cys Pro Asp Lys Glu Lys Lys Ala Tyr  
                           85                          90                          95  
 Val Arg Leu Ala Pro Asp Tyr Asp Ala Phe Asp Val Val Thr Lys Leu  
           100                          105                          110  
 Gly Ser Pro Lys Leu Ser Pro Ala Gly  
           115                          120

<210> 3566

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3566

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Met Gly Trp Gly Ser Arg Leu His His Met Ala Gly Ala Gln Ala Arg
  1             5             10             15
Arg Gly Ser Gly Trp Gly Ser Met Trp Gly Ala Trp Leu Trp Asp Pro
          20             25             30
Gly Gly Pro Gly Pro Cys Arg Pro Ala Val Gln Val Ser Ser Ala Asp
          35             40             45
Ala Arg Leu Met Val Phe Asp Lys Thr Glu Gly Thr Trp Arg Leu Leu
          50             55             60
Cys Ser Ser Arg Ser Asn Ala Arg Val Ala Gly Leu Ser Cys Glu Glu
          65             70             75             80
Met Gly Phe Leu Arg Tyr Trp Gly Pro Ser Glu Gly Trp Glu Pro Gly
          85             90             95
Gly Ala Gly Glu Gln Ala
          100

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<210> 3567

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3567

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Met Trp Ser Ala Ala Ser Thr Pro Pro Gly Thr Ala Ala Ser Ser Pro
  1             5             10             15
Thr Thr Gln His Pro Gly Lys Trp Ser Arg Ser Trp Trp Pro Leu Gly
          20             25             30
Ser Arg Pro Leu Ala Ser Val Pro Ser Thr Thr Trp Ala Pro Thr Pro
          35             40             45

```

Ser Ala Ser Pro Ser Ser Ser Cys Ser Gly Ser Gln Gly Ser Arg Gly  
 50 55 60  
 His Gly Arg Gly His Leu Glu Gly Glu Val Leu Pro Ser Met Gly Val  
 65 70 75 80  
 Val Ser Leu Cys Thr Pro Asn Gln Glu Pro Asp Ala Glu Ser Gln Gly  
 85 90 95  
 Lys Gln Gly Pro Leu Lys Ser Arg Asn Leu Leu Gly Pro Pro Ser Gly  
 100 105 110  
 Leu Pro Trp Gly Leu Gln Asp His Trp Gly Ser Thr Val Ser Gly Trp  
 115 120 125  
 Leu Gln Leu Leu Ser Tyr Trp Tyr Cys Cys Ala Arg Gly Glu Gly Met  
 130 135 140  
 Arg Gly Ser Ala Arg Lys Glu Arg Arg Val Ser Ser Ser Asp Thr Ala  
 145 150 155 160  
 Val Cys Ser Glu Lys Thr Pro Val Pro Arg Ile Val Glu Ile Glu Val  
 165 170 175  
 Gly Arg Glu Glu Val Arg Glu Arg Arg Leu Trp Pro Gln Gly Gln Leu  
 180 185 190  
 Thr Thr Asn Pro Leu Pro Thr Gln Ala Leu Ser  
 195 200

<210> 3568

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3568

Met Asn Leu Lys Arg Tyr Phe Glu Gln Lys His Arg Thr Glu Ala Ser  
 1 5 10 15  
 Val Pro Ala Pro Gln Ala Ala Cys Val Pro Gly Tyr Pro Val Pro Ser  
 20 25 30  
 Asp Pro Gly Glu Ala Gly Leu Ser Cys Thr Gly Ser Ser Gly Thr Gly  
 35 40 45  
 Tyr Cys Ala Ser Gln Phe Ser Val Ile Ser His Leu Arg Thr Ile Phe  
 50 55 60

Leu Pro Glu Leu Arg Pro Leu Pro Arg Leu Ser Leu Glu Asp Thr Asn  
 65                                70                                75                                80  
 Asn Glu Asp Thr Asn Asn Glu His Leu Leu Gly Ser Pro Glu Asp Pro  
                                   85                                90                                95  
 His Met Glu Ala Ala Gln Pro Ser Pro Tyr Pro Glu Ala His Arg Leu  
                                   100                                105                                110  
 His Lys Pro Arg Pro Gly Pro Ser Leu Met Ala His Arg Gln Val Leu  
                                   115                                120                                125  
 Arg Thr Pro Thr Ala Leu Leu  
                                   130                                135

<210> 3569

<211> 534

<212> PRT

<213> Homo sapiens

<400> 3569

Met Ser Leu Leu Arg Asp Ser Arg Asn Tyr Ser Gln Glu Thr Val Pro  
 1                                5                                10                                15  
 Lys Ala Asn Phe Gly Phe Ser Gly Ile Ser Pro Leu Glu Asp Glu Ile  
                                   20                                25                                30  
 Asn Lys Gly Ser Lys Ile Ser Gly Leu Gln Tyr Ser Ile Pro Asp Thr  
                                   35                                40                                45  
 Glu Asn Gln Thr Leu Asn Tyr Gly Lys Thr Lys Glu Met Glu Lys Gln  
                                   50                                55                                60  
 Asn Thr Asp Lys Cys His Val Ser Ser His Thr Arg Leu Thr Glu Ser  
 65                                70                                75                                80  
 Ser Val His Asp Phe Lys Thr Glu Asp Gln Glu Val Ile Thr Thr Asp  
                                   85                                90                                95  
 Phe Gly Gln Val Val Leu Arg Pro Lys Glu Ala Arg His Ala Asn Val  
                                   100                                105                                110  
 Asn Pro Asn Glu Asp Gly Glu Ser Ser Ser Ser Ser Pro Thr Glu Glu  
                                   115                                120                                125  
 Asn Ala Ala Thr Asp Asn Ile Ala Phe Met Ile Thr Glu Thr Thr Val  
                                   130                                135                                140

Gln Val Leu Ser Ser Gly Glu Val His Asp Ile Val Ser Gln Lys Gly  
 145 150 155 160  
 Glu Asp Ile Gln Thr Val Asn Ile Asp Ala Arg Lys Glu Met Thr Pro  
 165 170 175  
 Arg Gln Glu Gly Thr Asp Asn Glu Asp Pro Val Val Cys Leu Asp Lys  
 180 185 190  
 Lys Pro Val Ile Ile Ile Phe Asp Glu Pro Met Asp Ile Arg Ser Ala  
 195 200 205  
 Tyr Lys Arg Leu Ser Thr Ile Phe Glu Glu Cys Asp Glu Glu Leu Glu  
 210 215 220  
 Arg Met Met Met Glu Glu Lys Ile Glu Glu Glu Glu Glu Glu Asn  
 225 230 235 240  
 Gly Asp Ser Val Val Gln Asn Asn Asn Thr Ser Gln Met Ser His Lys  
 245 250 255  
 Lys Val Ala Pro Gly Asn Leu Arg Thr Gly Gln Gln Val Glu Thr Lys  
 260 265 270  
 Ser Gln Pro His Ser Leu Ala Thr Glu Thr Arg Asn Pro Gly Gly Gln  
 275 280 285  
 Glu Met Asn Arg Thr Glu Leu Asn Lys Phe Ser His Val Asp Ser Pro  
 290 295 300  
 Asn Ser Glu Cys Lys Gly Glu Asp Ala Thr Asp Asp Gln Phe Glu Ser  
 305 310 315 320  
 Pro Lys Lys Lys Phe Lys Phe Lys Phe Pro Lys Lys Gln Leu Ala Ala  
 325 330 335  
 Leu Thr Gln Ala Ile Arg Thr Gly Thr Lys Thr Gly Lys Lys Thr Leu  
 340 345 350  
 Gln Val Val Val Tyr Glu Glu Glu Glu Glu Asp Gly Thr Leu Lys Gln  
 355 360 365  
 His Lys Glu Ala Lys Arg Phe Glu Ile Ala Arg Ser Gln Pro Glu Asp  
 370 375 380  
 Thr Pro Glu Asn Thr Val Arg Arg Gln Glu Gln Pro Ser Ile Glu Ser  
 385 390 395 400  
 Thr Ser Pro Ile Ser Arg Thr Asp Glu Ile Arg Lys Asn Thr Tyr Arg  
 405 410 415  
 Thr Leu Asp Ser Leu Glu Gln Thr Ile Lys Gln Leu Glu Asn Thr Ile  
 420 425 430

Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys	Ser	Ser	Asn		
435					440					445							
Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu	Ala	Ser	Pro		
450					455					460							
Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu	Glu	Pro	Pro		
465					470					475						480	
Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly	Ala	Pro	Gln		
485					490					495							
Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg	Pro	Gly	Thr		
500					505					510							
Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro	Arg	Gln	Tyr		
515					520					525							
Arg	Gln	Val	Val	Leu	Pro												
530																	

&lt;210&gt; 3570

&lt;211&gt; 139

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3570

Met	Ala	Pro	Glu	Asp	Pro	Ala	Ser	Leu	Arg	His	Gly	Leu	Trp	His	Gln
1					5				10					15	
Arg	Thr	Gln	Pro	Leu	Ala	Pro	Trp	Thr	Met	Ala	Ala	Glu	Asp	Pro	Ala
				20				25						30	
Pro	Arg	Ile	Leu	Asp	Tyr	Gly	Ser	Arg	Gly	Pro	Ser	Leu	Pro	Ala	Ser
			35				40						45		
Trp	Thr	Lys	Ala	Pro	Glu	Asp	Pro	Ala	Pro	Ser	Gly	Pro	Gly	Leu	Trp
	50					55					60				
Gln	Gln	Arg	Thr	Gln	Pro	Leu	Ala	Ser	Trp	Thr	Met	Ala	Pro	Glu	Asp
65					70					75				80	
Pro	Ala	Ser	Leu	Arg	His	Gly	Leu	Trp	His	Gln	Arg	Thr	Gln	Pro	Leu
				85					90					95	
Ala	Pro	Trp	Thr	Met	Ala	Ala	Glu	Asp	Pro	Ala	Pro	Trp	Arg	Pro	Gly
			100					105						110	

Leu Arg His Ser Arg Thr Pro Gln His Arg Val Leu Leu His Arg Arg  
 115 120 125  
 Thr Leu Ala Gly Leu Arg Pro Gly Leu Ser Tyr  
 130 135

<210> 3571

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3571

Met Asp Gly Glu Gln Leu Glu Gly Ala Ser Ser Glu Lys Arg Glu Arg  
 1 5 10 15  
 Glu Ala Ala Glu Glu Gly Leu Ala Ser Val Lys Arg Pro Arg Arg Glu  
 20 25 30  
 Ala Leu Ser Asn Asp Thr Thr Glu Ser Leu Ala Ala Asn Ser Arg Gly  
 35 40 45  
 Arg Glu Lys Pro Arg Pro Leu His Ala Leu Ala Ala Gly Phe Ser Pro  
 50 55 60  
 Pro Val Asn Val Thr Val Ser Pro Arg Ser Glu Glu Ser His Thr Thr  
 65 70 75 80  
 Thr Val Ser Gly Gly Asn Gly Ser Val Phe Gln Ala Gly Pro Gln Leu  
 85 90 95  
 Gln Ala Leu Ala Asn Leu Glu Ala Arg Arg Gly Ser Ile Gly Ala Ala  
 100 105 110  
 Leu Ser Ser Arg Asp Val Ser Gly Leu Pro Val Tyr Ala Gln Ser Gly  
 115 120 125  
 Glu Pro Arg Arg Leu Thr Gln Ala Gln Val Ala Ala Phe Pro Gly Glu  
 130 135 140  
 Asn Ala Leu Glu His Ser Ser Asp Gln Asp Thr Trp Asp Ser Leu Arg  
 145 150 155 160  
 Ser Pro Gly Phe Cys Ser Pro Leu Ser Ser Gly Gly Gly Ala Glu Ser  
 165 170 175  
 Leu Pro Pro Gly Gly Pro Gly His Ala Glu Ala Gly His Leu Gly Lys  
 180 185 190



Val Cys Asp Phe His Leu Asn His Gln Gln Pro Ser Pro Thr Ser Val  
 195 200 205  
 Leu Pro Thr Glu Val Ala Ala Pro Pro Leu Glu Lys Ile Leu Ser Val  
 210 215 220  
 Asp Ser Val Ala Val Asp Cys Ala Tyr Arg Thr Val Pro Lys Pro Gly  
 225 230 235 240  
 Pro Gln Pro Gly Pro His Gly Ser Leu Leu Thr Glu Gly Cys Leu Arg  
 245 250 255  
 Ser Leu Ser Gly Asp Leu Asn Arg Phe Pro Cys Gly Met Glu Val His  
 260 265 270  
 Ser Gly Gln Arg Glu Leu Glu Ser Val Val Ala Val Gly Glu Ala Met  
 275 280 285  
 Ala Phe Glu Ile Ser Asn Gly Ser His Glu Leu Leu Ser Gln Gly Gln  
 290 295 300  
 Lys Gln Ile Phe Ile Gln Thr Ser Asp Gly Leu Ile Leu Ser Pro Pro  
 305 310 315 320  
 Gly Thr Ile Val Ser Gln Glu Glu Asp Ile Val Thr Val Thr Asp Ala  
 325 330 335  
 Glu Gly Arg Ala Cys Gly Trp Ala Arg  
 340 345

<210> 3572

<211> 484

<212> PRT

<213> Homo sapiens

<400> 3572

Met Glu Ala Glu Glu Ala Gln Arg Gly Ala Ser Pro Pro Ile Ser Ala  
 1 5 10 15  
 Ile Glu Glu Phe Ser Ile Ile Pro Glu Ala Pro Met Arg Ser Ser Gln  
 20 25 30  
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr  
 35 40 45  
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu  
 50 55 60

Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys			
65	70	75	80
Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu			
	85	90	95
Ala Cys Asp Thr Pro Glu His Trp Glu Ala Val Pro Gln Ser Leu Ala			
	100	105	110
Gly Arg Gln Ala Arg Thr Leu Ala Pro Pro Glu Leu Trp Ala Cys Pro			
	115	120	125
Ile Gln Ser Glu His Leu Asp Met Ala Pro Phe Ser Ser Asp Leu Gly			
	130	135	140
Ser Glu Glu Glu Glu Val Glu Phe Trp Pro Gly Leu Thr Ser Leu Thr			
145	150	155	160
Leu Gly Ser Gly Gln Ala Glu Glu Glu Glu Thr Ser Ser Asp Asn			
	165	170	175
Ser Gly Gln Thr Arg Tyr Tyr Ser Pro Cys Glu Glu His Pro Ala Glu			
	180	185	190
Thr Asn Gln Asn Glu Gly Ala Glu Ser Gly Thr Ile Arg Gln Gly Glu			
	195	200	205
Glu Leu Pro Ser Glu Glu Leu Gln Glu Ser Gln Gly Leu Leu His Pro			
	210	215	220
Gln Glu Val Gln Val Leu Glu Glu Gln Gly Gln Gln Glu Ala Gly Phe			
225	230	235	240
Arg Gly Glu Gly Thr Leu Arg Glu Asp Val Cys Ala Asp Gly Leu Leu			
	245	250	255
Gly Glu Glu Gln Met Ile Glu Gln Val Asn Asp Glu Lys Gly Glu Gln			
	260	265	270
Lys Gln Lys Gln Glu Gln Val Gln Asp Val Met Leu Gly Arg Gln Gly			
	275	280	285
Glu Arg Met Gly Leu Thr Gly Glu Pro Glu Gly Leu Asn Asp Gly Glu			
	290	295	300
Trp Glu Gln Glu Asp Met Glu Arg Lys Ala Gln Gly Gln Gly Gly Pro			
305	310	315	320
Glu Gln Gly Glu Glu Arg Lys Arg Glu Leu Gln Val Pro Glu Glu Asn			
	325	330	335
Arg Ala Asp Ser Gln Asp Glu Lys Ser Gln Thr Phe Leu Gly Lys Ser			
	340	345	350

Glu Glu Val Thr Gly Lys Gln Glu Asp His Gly Ile Lys Glu Lys Gly  
 355 360 365  
 Val Pro Val Ser Gly Gln Glu Ala Lys Glu Pro Glu Ser Trp Asp Gly  
 370 375 380  
 Gly Arg Leu Gly Ala Val Gly Arg Ala Arg Ser Arg Glu Glu Glu Asn  
 385 390 395 400  
 Glu His His Gly Pro Ser Met Pro Ala Leu Ile Ala Pro Glu Asp Ser  
 405 410 415  
 Pro His Cys Asp Leu Phe Pro Gly Ala Ser Tyr Leu Val Thr Gln Ile  
 420 425 430  
 Pro Gly Thr Gln Thr Glu Ser Arg Ala Glu Glu Leu Ser Pro Ala Ala  
 435 440 445  
 Leu Ser Pro Leu Leu Glu Pro Ile Arg Cys Ser His Gln Pro Ile Ser  
 450 455 460  
 Leu Leu Gly Ser Phe Leu Thr Glu Glu Ser Pro Asp Lys Glu Lys Leu  
 465 470 475 480  
 Leu Ser Val Leu

<210> 3573

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3573

Met Pro Ser Ser Pro Thr Trp Ala Leu Ile Leu His Ile Arg Leu Pro  
 1 5 10 15  
 Thr Leu Thr Pro Pro Ile Gly Pro Pro Gln Pro Cys Thr Tyr Ser Pro  
 20 25 30  
 His Gly Cys Gln Pro His Pro Ala His Ala Glu Ser Pro Cys Cys Gly  
 35 40 45  
 Val Pro Pro His Gly Gln Leu His Thr Leu Leu Gly Leu Thr Pro Ala  
 50 55 60  
 Leu Pro Thr Ser Thr Pro Ser Leu Pro Cys Thr Gly Pro Pro Pro Arg  
 65 70 75 80

Val Asp Val Leu Cys Gly Arg Gln Ser Gly Ala Pro Lys Asp Gly His  
                     85                    90                    95  
 Thr Leu Ser Pro Gly Thr Cys Glu Cys Tyr Met Ala Lys Gly Thr Leu  
                     100                    105                    110  
 Gln Ile Lys Ile Lys Ile Val Asn Phe Lys Thr Gly Lys Leu Ser Trp  
                     115                    120                    125  
 Ile Ile Cys Met Gly Pro Met Gln Ser Gln Gly Ser Ile Arg Ile Glu  
                     130                    135                    140  
 Lys Ala Gly Arg Lys Lys Gly Arg Trp Glu Arg Gly Thr Gly Pro Ala  
 145                    150                    155                    160  
 Ala Ala Gly Gly Lys  
                     165

<210> 3574

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3574

Met Ser Thr Ile Gly Ser Phe Glu Gly Phe Gln Ala Val Ser Leu Lys  
   1                    5                    10                    15  
 Gln Glu Gly Asp Asp Gln Pro Ser Glu Thr Asp His Leu Ser Met Glu  
                     20                    25                    30  
 Glu Glu Asp Pro Met Pro Arg Gln Ile Ser Arg Gln Ser Ser Val Thr  
                     35                    40                    45  
 Glu Ser Thr Leu Tyr Pro Asn Pro Tyr His Gln Pro Tyr Ile Ser Arg  
                     50                    55                    60  
 Lys Tyr Phe Ala Thr Arg Pro Gly Ala Ile Glu Thr Ala Met Glu Asp  
 65                    70                    75                    80  
 Leu Lys Gly His Val Ala Glu Thr Ser Gly Glu Thr Ile Gln Gly Phe  
                     85                    90                    95  
 Trp Leu Leu Thr Lys Ile Asp His Trp Asn Asn Glu Lys Glu Arg Ile  
                     100                    105                    110  
 Leu Leu Val Thr Asp Lys Thr Leu Leu Ile Cys Lys Tyr Asp Phe Ile  
                     115                    120                    125

Met Leu Ser Cys Val Gln Leu Gln Arg Ile Pro Leu Ser Ala Val Tyr  
 130 135 140  
 Arg Ile Cys Leu Gly Lys Phe Thr Phe Pro Gly Met Ser Leu Asp Lys  
 145 150 155 160  
 Arg Gln Gly Glu Gly Leu Arg Ile Tyr Trp Gly Ser Pro Glu Glu Gln  
 165 170 175  
 Ser Leu Leu Ser Arg Trp Asn Pro Trp Ser Thr Glu Val Pro Tyr Ala  
 180 185 190  
 Thr Phe Thr Glu His Pro Met Lys Tyr Thr Ser Glu Lys Phe Leu Glu  
 195 200 205  
 Ile Cys Lys Leu Ser Gly Phe Met Ser Lys Leu Val Pro Ala Ile Gln  
 210 215 220  
 Asn Ala His Lys Asn Ser Thr Gly Ser Gly Arg Gly Lys Lys Leu Met  
 225 230 235 240  
 Val Leu Thr Glu Pro Ile Leu Ile Glu Thr Tyr Thr Gly Leu Met Ser  
 245 250 255  
 Phe Ile Gly Asn Arg Asn Lys Leu Gly Tyr Ser Leu Ala Arg Gly Ser  
 260 265 270  
 Ile Gly Phe  
 275

<210> 3575

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3575

Met Gln Pro Val Ile Ser Ala Leu Asn Ile Gln Thr Gln Thr Val Gln  
 1 5 10 15  
 Thr His Pro Ala Pro Arg Asn Thr Ser Glu His Cys Thr Leu Pro Ala  
 20 25 30  
 Cys Asp Ala Gln Glu Glu His Arg Asp Thr Val Asp Gly Ser Ile Ala  
 35 40 45  
 Arg Thr Glu Ser Ala Ser Gly Glu Ile Trp Arg Gln Thr His Met Asp  
 50 55 60

Gly Glu His His Val Asn Thr Lys Ala Glu Ile Ser Val Met Ser Ala  
 65 70 75 80  
 Asn Gln Gly Ala Pro Arg Ile Thr Ser Lys Pro Pro Glu Ala Arg Arg  
 85 90 95  
 Glu Ala Arg Asp Arg Ser Leu Pro Ser Ala Phe Ser Leu Arg Gly Leu  
 100 105 110  
 Thr Asp Thr Leu Ile Leu Gly Phe Cys Pro Pro Glu Leu  
 115 120 125

<210> 3576

<211> 327

<212> PRT

<213> Homo sapiens

<400> 3576

Met Ser Leu Met Thr Arg Glu Asn Leu Ala Phe Arg Gly Ser Leu Met  
 1 5 10 15  
 Gly Cys Ser Glu Leu Lys Pro Phe Gln Glu Leu Thr His Gln Ser Ala  
 20 25 30  
 Val Ser His Ser Arg Ala Asp Val Ala Asp Val Trp Trp Tyr Cys Gly  
 35 40 45  
 Gly Pro Leu Leu Asp Thr Leu Pro Ser Asn Trp Ser Gly Thr Cys Thr  
 50 55 60  
 Leu Val Gln Phe Ala Ile Pro Phe Ala Leu Ala Phe Leu Gln Pro Glu  
 65 70 75 80  
 Lys Glu Lys Pro Gln His Arg Lys Ile Arg Glu Ala Pro Tyr Gly Ser  
 85 90 95  
 Phe Asp Ser Gln Val Tyr Leu Asp Ala Thr Gly Val Pro Gln Gly Val  
 100 105 110  
 Pro His Lys Phe Lys Ala Gln Asp Gln Ile Ala Ala Gly Phe Glu Ser  
 115 120 125  
 Ile Phe Trp Trp Val Thr Ile Ser Lys Asn Ile Asp Trp Ile Asn Tyr  
 130 135 140  
 Ile Tyr Tyr Asn Gln Gln Arg Phe Ile Asn Tyr Thr Arg Asp Ala Val  
 145 150 155 160

Lys	Gly	Ile	Ala	Glu	Gln	Leu	Gly	Pro	Thr	Ser	Gln	Met	Ala	Trp	Glu			
				165							170					175		
Asn	Arg	Met	Ala	Leu	Asp	Met	Ile	Leu	Ala	Lys	Lys	Gly	Gly	Val	Cys			
				180							185					190		
Val	Met	Ile	Lys	Thr	Gln	Cys	Cys	Thr	Phe	Ile	Pro	Asn	Asn	Thr	Ala			
				195							200					205		
Pro	Ser	Gly	Ser	Ile	Thr	Arg	Ala	Leu	Gln	Gly	Leu	Thr	Ala	Leu	Ser			
				210							215					220		
Asn	Glu	Leu	Ala	Lys	Asn	Ser	Gly	Val	Asn	Asp	Pro	Phe	Ser	Gly	Trp			
225							230							235			240	
Leu	Glu	Arg	Trp	Phe	Gly	Lys	Trp	Lys	Gly	Ile	Ile	Ala	Ser	Ile	Leu			
				245							250					255		
Thr	Ser	Leu	Ala	Ala	Val	Ile	Gly	Val	Val	Ile	Leu	Phe	Gly	Cys	Cys			
				260							265					270		
Val	Thr	Pro	Cys	Ile	Arg	Gly	Leu	Val	Gln	Arg	Leu	Ile	Glu	Thr	Val			
				275							280					285		
Leu	Thr	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Pro	Tyr	Ser	Asp	Lys	Leu			
				290							295					300		
Phe	Leu	Leu	Glu	Asp	Gln	Val	Glu	Gln	Gln	Ser	Gln	Asp	Leu	Leu	Lys			
305							310							315			320	
Arg	Phe	Glu	Glu	Glu	Gly	Pro												
				325														

&lt;210&gt; 3577

&lt;211&gt; 122

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3577

Met Leu Val Leu Thr Ser Ala Ile Pro Gln Ala Lys His Ser Phe Tyr  
1 5 10 15  
Gln Ala His Cys Leu Ala Gly Gly Arg Lys Phe His Arg Leu Ser Leu  
20 25 30  
Gly Ser Phe Cys Arg Asn Asn Pro Tyr Ser Ser Gly Gln Gly Ala Asn  
35 40 45

Val Ser Ile Gln Leu Ala Ala Lys Asn Val Tyr Pro Asn Lys Gln Gly  
 50 55 60  
 Arg Pro Thr Asp Pro Leu Asp Pro Leu Glu Met Asp Leu Gly His Ser  
 65 70 75 80  
 Ala Phe His Asp Phe Ser Lys Gln Arg Gly Val Val Ile Leu Ser Lys  
 85 90 95  
 Ser Trp Arg Gln Cys Gln Cys Pro Ala Thr His His Val Pro Val Leu  
 100 105 110  
 Glu Lys Pro Leu Cys Thr Pro Leu Cys Trp  
 115 120

<210> 3578

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3578

Met Leu His Gly Leu Gly Pro Val Pro Pro Pro Leu Trp Ala Ala Val  
 1 5 10 15  
 Ser Ala Ser Arg Trp Gly Gly Gly Gly Pro Gln Pro Leu Pro Gln Val  
 20 25 30  
 Ser Lys Glu Gly Ser Gly Leu Ala Arg Pro Asp Pro Ser Cys Cys Val  
 35 40 45  
 Arg Ala Gly Leu Gly Ala Ala Lys Thr Pro Gly Ala Gln Gly Glu Arg  
 50 55 60  
 Leu Gly Pro Arg Gly Thr Arg Arg Ala Arg Gly Leu Gln Leu Arg Pro  
 65 70 75 80  
 Val Gly Gly Gln Ser Arg Arg Glu Ala Ala Pro Ala Cys Ser Gly Pro  
 85 90 95  
 Gln Pro Cys Arg Pro His Gly Thr Gly Ala Ala Ser Ser Leu Gly Leu  
 100 105 110  
 Gln Asp Ala Asp  
 115



&lt;210&gt; 3579

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3579

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Met Leu Gln Ser Glu Ile Gln Ala Met Lys Lys Leu Arg His Lys His
  1             5             10             15
Ile Leu Ala Leu Tyr Ala Val Val Ser Val Gly Asp Pro Val Tyr Ile
      20             25             30
Ile Thr Glu Leu Met Ala Lys Gly Ser Leu Leu Glu Leu Leu Arg Asp
      35             40             45
Ser Asp Glu Lys Val Leu Pro Val Ser Glu Leu Leu Asp Ile Ala Trp
      50             55             60
Gln Val Ala Glu Gly Met Cys Tyr Leu Glu Ser Gln Asn Tyr Ile His
      65             70             75             80
Arg Asp Leu Ala Ala Arg Asn Ile Leu Val Gly Glu Asn Thr Leu Cys
      85             90             95
Lys Val Gly Asp Phe Gly Leu Ala Arg Leu Ile Lys Glu Asp Val Tyr
      100            105            110
Leu Ser His Asp His Asn Ile Pro Tyr Lys Trp Thr Ala Pro Glu Ala
      115            120            125
Leu Ser Arg Gly His Tyr Ser Thr Lys Ser Asp Val Trp Ser Phe Gly
      130            135            140
Ile Leu Leu His Glu Met Phe Ser Arg Gly Gln Val Pro Tyr Pro Gly
      145            150            155            160
Thr Val Pro Thr Val Pro Asp Trp Ala
      165

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&lt;210&gt; 3580

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3580

Met Pro Ile Ala Ala Phe Gly Gln Lys Gln Arg Pro Ser Arg Phe Phe  
 1 5 10 15  
 Met Thr Pro Pro Arg Leu His Tyr Thr Pro Pro Leu Gln Ser Pro Ile  
 20 25 30  
 Ile Asp Asn Asp Pro Leu Leu Gly Gln Ser Pro Trp Arg Ser Lys Ile  
 35 40 45  
 Ser Gly Ser Asp Thr Glu Thr Leu Gly Gly Phe Pro Val Glu Phe Leu  
 50 55 60  
 Ile Gln Val Thr Arg Leu Ser Lys Ile Leu Met Ile Lys Lys Glu His  
 65 70 75 80  
 Ile Lys Lys Leu Arg Glu Met Asn Thr Glu Ala Glu Lys Leu Lys Ser  
 85 90 95  
 Tyr Ser Met Pro Ile Ser Ile Glu Phe Gln Arg Arg Tyr Ala Thr Ile  
 100 105 110  
 Val Leu Glu Leu Glu Gln Leu Asn Lys Asp Leu Asn Lys Val Leu His  
 115 120 125  
 Lys Val Gln Gln Tyr Cys Tyr Glu Leu Ala Pro Asp Gln Gly Leu Gln  
 130 135 140  
 Pro Ala Asp Gln Pro Thr Asp Met Arg Arg Arg Cys Glu Glu Glu Ala  
 145 150 155 160  
 Gln Glu Ile Val Arg His Ala Asn Ser Ser Thr Gly Gln Pro Cys Val  
 165 170 175  
 Glu Asn Glu Asn Leu Thr Asp Leu Ile Ser Arg Leu Thr Ala Ile Leu  
 180 185 190  
 Leu Gln Ile Lys Cys Leu Ala Glu Gly Gly Asp Leu Asn Ser Phe Glu  
 195 200 205  
  
 Phe Lys Ser Leu Thr Asp Ser Leu Asn Asp Ile Lys Ser Thr Ile Asp  
 210 215 220  
 Ala Ser Asn Ile Ser Cys Phe Gln Asn Asn Val Glu Ile His Val Ala  
 225 230 235 240  
 His Ile Gln Ser Gly Leu Ser Gln Met Gly Asn Leu His Ala Phe Ala  
 245 250 255  
 Ala Asn Asn Thr Asn Arg Asp  
 260

&lt;210&gt; 3581

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3581

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Met Ala Glu Asn Asn Glu Asn Ile Ser Lys Asn Val Asp Val Arg Pro
  1              5              10              15
Lys Thr Ser Arg Ser Arg Ser Ala Asp Arg Lys Asp Gly Tyr Val Trp
      20              25              30
Ser Gly Lys Glu Leu Ser Trp Ser Lys Lys Ser Glu Ser Tyr Ser Asp
      35              40              45
Ala Glu Thr Val Asn Gly Ile Glu Lys Thr Glu Val Ser Leu Arg Asn
      50              55              60
Gln Glu Arg Lys His Ser Cys Ser Ser Ile Glu Leu Asp Leu Asp His
      65              70              75              80
Ser Cys Gly His Arg Phe Leu Gly Arg Ser Leu Lys Gln Lys Leu Gln
      85              90              95
Asp Ala Val Gly Gln Cys Phe Pro Ile Lys Asn Cys Ser Ser Arg His
      100             105             110
Ser Ser Gly Leu Pro Ser Lys Arg Lys Ile His Ile Ser Glu Leu Met
      115             120             125
Leu Asp Lys Cys Pro Phe Pro Pro Arg Ser Asp Leu Ala Phe Arg Trp
      130             135             140
His Phe Ile Lys Arg His Thr Ala Pro Ile Asn Ser Lys Ser Asp Glu
      145             150             155             160
Trp Val Ser Thr Asp Leu Ser Gln Thr Glu Leu Arg Asp Gly Gln Leu
      165             170             175
Lys Arg Arg Asn Met Glu Glu Asn Ile Asn Cys Phe Ser His Thr Asn
      180             185             190
Val Gln Pro Cys Val Ile Thr Thr Asp Asn Ala Leu Cys Arg Glu Gly
      195             200             205
Pro Met Thr Gly Ser Val Met Asn Leu Val Ser Asn Asn Ser Ile Glu
      210             215             220
Asp Ser Asp Met Asp Ser Asp Asp Glu Ile Leu Thr Leu Cys Thr Ser

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225	230	235	240
Ser Arg Lys Arg Asn Lys Pro Lys Trp Asp Leu Asp Asp Glu Ile Leu			
	245	250	255
Gln Leu Glu Thr Pro Pro Lys Tyr His Thr Gln Ile Asp Tyr Val His			
	260	265	270
Cys Leu Val Pro Asp Leu Leu Gln Ile Asn Asn Asn Pro Cys Tyr Trp			
	275	280	285
Gly Val Met Asp Lys Tyr Ala Ala Glu Ala Leu Leu Glu Gly Lys Pro			
	290	295	300
Glu Gly Thr Phe Leu Leu Arg Asp Ser Ala Gln Glu Asp Tyr Leu Phe			
305	310	315	320
Ser Val Ser Phe Arg Arg Tyr Ser Arg Ser Leu His Ala Arg Ile Glu			
	325	330	335
Gln Trp Asn His Asn Phe Ser Phe Asp Ala His Asp Pro Cys Val Phe			
	340	345	350
His Ser Pro Asp Ile Thr Gly Leu Leu Glu His Tyr Lys Asp Pro Ser			
	355	360	365
Ala Cys Met Phe Phe Glu Pro Leu Leu Ser Thr Pro Leu Ile Arg Thr			
	370	375	380
Phe Pro Phe Ser Leu Gln His Ile Cys Arg Thr Val Ile Cys Asn Cys			
385	390	395	400
Thr Thr Tyr Asp Gly Ile Asp Ala Leu Pro Ile Pro Ser Ser Met Lys			
	405	410	415
Leu Tyr Leu Lys Glu Tyr His Tyr Lys Ser Lys Val Arg Val Leu Arg			
	420	425	430
Ile Asp Ala Pro Glu Gln Gln Cys			
	435	440	

&lt;210&gt; 3582

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3582

Met Phe Leu Val Thr Asn Ser Ile Trp Pro Asp Phe Lys Val Ser His  
 1 5 10 15  
 Pro Ser Phe Cys Gln Leu Gly Ile Cys Val Asn Val Leu Ile Leu Met  
 20 25 30  
 Lys Trp Ser Phe Leu Ser Gln Leu Ile Phe Leu Val Ile Asp Ser Ile  
 35 40 45  
 Cys Leu Leu Leu Lys Leu Val Thr Ser Phe Cys Leu Leu Asp Ile Tyr  
 50 55 60  
 Met Val Cys His Pro Phe Ser Leu Asn Lys Ser Arg Ser Leu Cys Phe  
 65 70 75 80  
 Lys Val His Phe Leu Gln Lys Ala Tyr Arg His Phe Phe Ile Leu Ser  
 85 90 95  
 Leu Asn Pro Cys Met Arg Asn Ser Val  
 100 105

<210> 3583

<211> 301

<212> PRT

<213> Homo sapiens

<400> 3583

Met Cys Val Trp Arg Leu Ile Leu Asp Ala Val Asp Gly Arg Glu Cys  
 1 5 10 15  
 His His Leu Val His Cys Tyr Met Pro Gln Glu Ile Ile Ala Gln Pro  
 20 25 30  
 Phe Leu Asn Phe Lys Val Phe Leu Phe Asn Arg Phe Cys Thr Asp Cys  
 35 40 45  
 Lys Asn Lys Val Leu Arg Ala Tyr Asn Ile Leu Ile Gly Glu Leu Asp  
 50 55 60  
 Cys Ser Lys Glu Lys Gly Tyr Cys Ala Ala Leu Tyr Glu Gly Leu Arg  
 65 70 75 80  
 Cys Cys Pro His Glu Arg His Ile His Val Cys Cys Glu Thr Asp Phe  
 85 90 95  
 Ile Ala His Leu Leu Gly Arg Ala Glu Pro Glu Phe Ala Gly Gly Arg  
 100 105 110

Arg Glu Arg His Ala Lys Thr Ile Asp Ile Ala Gln Glu Glu Val Leu  
 115 120 125  
 Thr Cys Leu Gly Ile His Leu Tyr Glu Arg Leu His Arg Ile Trp Gln  
 130 135 140  
 Lys Leu Arg Ala Glu Glu Gln Thr Trp Gln Met Leu Phe Tyr Leu Gly  
 145 150 155 160  
 Val Asp Ala Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln  
 165 170 175  
 Gly Ile Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu  
 180 185 190  
 Arg Val Arg Glu Leu Lys Gln Glu Lys Lys Arg Gln Lys Arg Lys Asn  
 195 200 205  
 Arg Arg Lys Asn Lys Cys Val Cys Asp Ile Pro Thr Pro Leu Gln Thr  
 210 215 220  
 Ala Asp Glu Lys Glu Val Ser Gln Glu Lys Glu Thr Asp Phe Ile Glu  
 225 230 235 240  
 Asn Ser Ser Cys Lys Ala Cys Gly Ser Thr Glu Asp Gly Asn Thr Cys  
 245 250 255  
 Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser  
 260 265 270  
 Ser Gly Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro  
 275 280 285  
 His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met  
 290 295 300

<210> 3584

<211> 321

<212> PRT

<213> Homo sapiens

<400> 3584

Met Ser Val Gln Glu Ala Gly Ala Thr Ser Pro Pro Ala Arg Ile Leu  
 1 5 10 15  
 Lys Glu Pro Gly Pro Ala Gln Pro Leu Ser Ala Gly Pro Glu Trp Asp  
 20 25 30

Arg Gly Arg Gly Val Arg Arg Arg Cys Gly Pro Gly Val Leu Leu Gly  
 35 40 45  
 Ala Ser Ser Val Ser Trp Gly Leu Ala Thr Ser Gly His Gln Gly Arg  
 50 55 60  
 Gly Cys Gly Asp Gly Gly Gly Ala Arg Val Pro Thr Lys Ser Val Pro  
 65 70 75 80  
 Gly Gly Gly Pro Arg Ala Ser Arg Ser Val Arg Glu Val Ala Gly Gly  
 85 90 95  
 Gly Phe Ala Cys Asn Pro Gly Lys Gly Pro Ala Ala Val Arg Leu Ala  
 100 105 110  
 Leu Gly Gly Gly Trp Lys Ile Ser Lys Ser Pro Ile Pro Val Gln Met  
 115 120 125  
 Ala Ala Gly Ala Ala Gly Cys Arg Thr Gln Ala Arg Gly Gln Arg Leu  
 130 135 140  
 Thr Ser Arg Gly Arg Glu Ser Pro Glu Ala Thr Gly Val Pro Glu Arg  
 145 150 155 160  
 Arg Gly Asp Pro Glu Thr Arg Arg Asn Arg Lys Ser Leu Thr Pro Gly  
 165 170 175  
 Ser Gly Glu Phe Gly Val Arg Ser Gln Ser Cys Asp Ser Thr Val Pro  
 180 185 190  
 Glu Ser Leu Glu Arg Ala Leu Trp Ala Gln Ser Ser Gln Leu Ala Gly  
 195 200 205  
 Gly Pro Gly Leu Ala Pro Arg Pro Gly Ala Ser Gly Arg Gly Arg Trp  
 210 215 220  
 Val Ser Ala Pro Leu Pro Pro Lys Gly Thr Glu Thr Phe Phe Cys Val  
 225 230 235 240  
 Leu Pro Ser Ala Leu Arg Ala Ala Leu Ser Cys Gly Pro Ser Trp Gly  
 245 250 255  
 Glu Asp Ser Gly Pro Arg His Arg Glu Leu Arg Pro Asp Pro Asp Ser  
 260 265 270  
 Arg Arg Ala Ser Ala Glu Arg Ser Pro Arg Cys Pro Pro Gly Ser Pro  
 275 280 285  
 Arg Lys Ala Gly Pro Gly Arg Arg Asp Ala Arg Gly Ala Ala Leu Gly  
 290 295 300  
 Gly Ala Phe Arg Val Leu Ala Gly Arg Ala Leu Leu Arg Arg Gly Met  
 305 310 315 320

Glu

&lt;210&gt; 3585

&lt;211&gt; 278

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3585

```

Met Ser His Leu Pro Thr Ala Pro Arg Val Leu Phe Gln Leu Pro Ala
 1             5             10             15
Ile His Ser Pro Thr Pro Leu Gly Pro Gln Leu Arg Leu Glu Pro Asp
          20             25             30
Asn Trp Arg Ser Gln Gln Asp Ser Glu Val Ser Glu Ser Ser Ala Pro
          35             40             45
Asp Gly Pro Gly Ser Ala Met Trp Ser Gln His Gly Leu Trp Tyr Leu
          50             55             60
Val Ala Ala Phe Leu Leu Arg Trp Ala Pro Val Lys Thr Arg Val Met
          65             70             75             80
Val Asp Gly Ser Pro Met Thr Met Glu Lys Ala Leu Lys His Phe Glu
          85             90             95
Ala Gln Ser Thr Glu Lys Glu Arg Ala Phe Ala Gly Arg Val Gly Trp
          100            105            110
Ala Phe Leu Thr Val Leu Gln Glu Val His Thr Gln Ser Leu Arg Asp
          115            120            125
Thr Ala Gln Val Arg Asp Leu Gln Gly Gln Ala Glu Arg Leu Glu Ile
          130            135            140
Arg Thr Tyr Ser Leu Lys Arg Glu Leu Gly Pro Ala Thr Ser Val Gly
          145            150            155            160
Leu Gly Gln Pro Ser Gln Ser Glu Thr Pro Ala Arg Ser Asp Thr Lys
          165            170            175
Glu Glu Glu Pro Pro Leu Gln Ala His Pro Val Val Arg Gln Lys Ile
          180            185            190
Glu Gln Glu Gln Pro Leu Gly Pro Gln Gly Val Gly Val Gln Gly Pro
          195            200            205

```



Pro Thr Val Val Glu His Met Ser Tyr Ser Ala Tyr Thr Pro Thr Asp  
 210 215 220  
 Leu His Lys Leu Gly Lys Gln Cys Gln Gln Cys Met Gly Glu Pro Leu  
 225 230 235 240  
 Ser Thr Trp Met Leu Cys Leu Leu Asp Glu Gly Ala Asp Gly Ile Val  
 245 250 255  
 Cys Ser Ala Ser Glu Met Glu Lys Leu Ala Ser Ile Met Thr His Pro  
 260 265 270  
 Ser Asn Ser Asp Cys Arg  
 275

<210> 3586

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3586

Met Pro Leu Val Asn Thr Leu Val Phe Trp Gly Val Ser Gly Asn Ser  
 1 5 10 15  
 Val Gly Gln Asp Cys Phe Ile Tyr Gly Ser Phe Arg Val Cys Tyr Tyr  
 20 25 30  
 Leu Pro Leu Ile Phe Thr Tyr His Leu Ser Phe Pro Val Phe Ser Tyr  
 35 40 45  
 Leu Phe Leu Asn Phe His Ser Pro Lys Lys Met Ser Val Phe Gly Pro  
 50 55 60  
 Val Pro Lys Glu Ser Ala Ile Arg Ile Leu Arg Gly Ile Ile Leu Asn  
 65 70 75 80  
 Gln Tyr Ile Asn Phe Arg Gly Trp Pro Gln Asp Leu Gln Gln Gly Ser  
 85 90 95  
 Val Phe Leu Cys Leu Thr Leu Gln Gly Phe Arg Gly Gln Gly Val Ser  
 100 105 110  
 Ser Asn Met Arg Val Arg Gly Trp  
 115 120

&lt;210&gt; 3587

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3587

```

Met Thr Glu Glu Ser Ser Asp Val Pro Arg Glu Leu Ile Glu Ser Ile
  1             5             10             15
Lys Asp Val Ile Gly Arg Lys Ile Lys Ile Ser Val Lys Lys Lys Val
      20             25             30
Lys Leu Glu Val Lys Gly Asp Lys Val Glu Asn Lys Val Leu Val Leu
      35             40             45
Thr Ser Cys Arg Ala Phe Leu Val Thr Ala Arg Ile Pro Thr Lys Leu
      50             55             60
Glu Leu Thr Phe Ser Tyr Leu Glu Ile His Gly Val Val Cys Ser Lys
      65             70             75             80
Ser Ala Gln Met Ile Val Glu Thr Glu Lys Cys Ser Ile Ser Met Lys
      85             90             95
Met Ala Ser Pro Glu Asp Val Ser Glu Val Leu Ala His Ile Gly Thr
      100            105            110
Cys Leu Arg Lys Ile Phe Pro Gly Leu Ser Pro Val Arg Ile Met Lys
      115            120            125
Lys Val Ser Met Glu Pro Ser Glu Arg Leu Ala Ser Leu Gln Ala Leu
      130            135            140
Trp Asp Ser Gln Thr Val Ala Glu Gln Gly Pro Cys Gly Gly Phe Ser
      145            150            155            160
Gln Met Tyr Ala Cys Val Cys Asp Trp Leu Gly Phe Ser Tyr Arg Glu
      165            170            175

Glu Val Gln Trp Asp Val Asp Thr Ile Tyr Leu Thr Gln Asp Thr Arg
      180            185            190
Glu Leu Asn Leu Gln Asp Phe Ser His Leu Asp His Arg Asp Leu Ile
      195            200            205
Pro Ile Ile Ala Ala Leu Glu Tyr Asn Gln Trp Phe Thr Lys Leu Ser
      210            215            220
Ser Lys Asp Leu Lys Leu Ser Thr Asp Val Cys Glu Gln Ile Leu Arg

```

225                      230                      235                      240  
 Val Val Ser Arg Ser Asn Arg Leu Glu Glu Leu Val Leu Glu Asn Ala  
                                  245                      250                      255  
 Gly Leu Arg Thr Asp Phe Ala Gln Lys Leu Ala Ser Ala Leu Ala His  
                                  260                      265                      270  
 Asn Pro Asn Ser Gly Leu His Thr Ile Asn Leu Ala Gly Asn Pro Leu  
                                  275                      280                      285  
 Glu Asp Arg Gly Val Ser Ser Leu Ser Ile Gln Phe Ala Lys Leu Pro  
                                  290                      295                      300  
 Lys Gly Leu Lys His Leu Asn Leu Ser Lys Thr Ser Leu Ser Pro Lys  
 305                      310                      315                      320  
 Gly Val Asn Ser Leu Ser Gln Ser Leu Ser Ala Asn Pro Leu Thr Ala  
                                  325                      330                      335  
 Ser Thr Leu Val His Leu Asp Leu Ser Gly Asn Val Leu Arg Gly Asp  
                                  340                      345                      350  
 Asp Leu Ser His Met Tyr Asn Phe Leu Ala Gln Pro Asn Ala Ile Val  
                                  355                      360                      365  
 His Leu Asp Leu Ser Asn Thr Glu Cys Ser Leu Asp Met Val Cys Gly  
                                  370                      375                      380  
 Ala Leu Leu Arg Gly Cys Leu Gln Tyr Leu Ala Val Leu Asn Leu Ser  
 385                      390                      395                      400  
 Arg Thr Val Phe Ser His Arg Lys Gly Lys Glu Val Pro Pro Ser Phe  
                                  405                      410                      415  
 Lys Gln Phe Phe Ser Ser Ser Leu Ala Leu Met His Ile Asn Leu Ser  
                                  420                      425                      430  
 Gly Thr Lys Leu Ser Pro Glu Pro Leu Lys Ala Leu Leu Leu Gly Leu  
                                  435                      440                      445  
 Ala Cys Asn His Asn Leu Lys Gly Val Ser Leu Asp Leu Ser Asn Cys  
                                  450                      455                      460  
 Glu Leu Arg Ser Gly Gly Ala Gln Val Leu Glu Gly Cys Ile Ala Glu  
 465                      470                      475                      480  
 Ile His Asn Ile Thr Gln Leu Gly Thr Arg Tyr Arg Asn Ala Val Leu  
                                  485                      490                      495  
 Arg Val Tyr

&lt;210&gt; 3588

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

Met Leu Leu Phe Asn Trp Ile Cys Ile Val Ile Thr Gly Leu Ala Met

1 5 10 15

Asp Met Gln Leu Leu Met Ile Pro Leu Ile Met Ser Val Leu Tyr Val

20 25 30

Trp Ala Gln Leu Asn Arg Asp Met Ile Val Ser Phe Trp Phe Gly Thr

35 40 45

Arg Phe Lys Ala Cys Tyr Leu Pro Trp Val Ile Leu Gly Phe Asn Tyr

50 55 60

Ile Ile Gly Gly Ser Tyr Pro Met Asp Leu Gly Gly Arg Asn Phe Leu

65 70 75 80

Ser Thr Pro Gln Phe Leu Tyr Arg Trp Leu Pro Ser Arg Arg Gly Gly

85 90 95

Val Ser Gly Phe Gly Val Pro Pro Ala Ser Met Arg Arg Ala Ala Asp

100 105 110

Gln Asn Gly Gly Gly Gly Arg His Asn Trp Gly Gln Gly Phe Arg Leu

115 120 125

Gly Asp Gln

130

&lt;210&gt; 3589

&lt;211&gt; 352

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3589

Met His Thr Gln Pro Leu Lys Glu Ala Lys Arg Met Pro Asp Arg Pro

1 5 10 15

Ile Lys Trp Asp Lys Ser Tyr Tyr Ser Phe Thr Gly Phe Lys Asp Pro

20	25	30
Asp Glu Asp Leu Glu Gln Val Ser Arg Val Glu Thr Thr Leu Thr Ser		
35	40	45
Trp Leu Asp Asn Asn Gly Lys Ser Ala Val Lys Lys Leu Lys Asn Ser		
50	55	60
Leu Pro Leu Arg Lys Glu Leu Asp Arg Leu Lys Asp Glu Leu Ser His		
65	70	75
Gln Leu Gln Leu Ser Asp Ile Arg Trp Gln Arg Ser Trp Gly Ile Ala		
85	90	95
His Arg Cys Ser Gln Leu His Ser Leu Ser Arg Leu Ala Gln Gln Asn		
100	105	110
Leu Glu Thr Leu Lys Lys Ala Lys Gly Cys Thr Ile Ile Phe Thr Asp		
115	120	125
Arg Ser Gly Met Ser Ala Val Gly His Val Met Leu Gly Thr Met Asp		
130	135	140
Val His His His Trp Thr Lys Leu Phe Glu Arg Leu Pro Ser Tyr Phe		
145	150	155
Asp Leu Gln Arg Arg Leu Met Ile Leu Glu Asp Gln Ile Ser Tyr Leu		
165	170	175
Leu Gly Gly Ile Gln Val Val Tyr Ile Glu Glu Leu Gln Pro Val Leu		
180	185	190
Thr Leu Glu Glu Tyr Tyr Ser Leu Leu Asp Val Phe Tyr Asn Arg Leu		
195	200	205
Leu Lys Ser Arg Ile Leu Phe His Pro Arg Ser Leu Arg Gly Leu Gln		
210	215	220
Met Ile Leu Asn Ser Asp Arg Tyr Ala Pro Ser Leu His Glu Leu Gly		
225	230	235
His Phe Asn Ile Pro Thr Leu Cys Asp Pro Ala Asn Leu Gln Trp Phe		
245	250	255
Ile Leu Thr Lys Ala Gln Gln Ala Arg Glu Asn Met Lys Arg Lys Glu		
260	265	270
Glu Leu Lys Val Ile Glu Asn Glu Leu Ile Gln Ala Ser Thr Lys Lys		
275	280	285
Phe Ser Leu Glu Lys Leu Tyr Lys Glu Pro Ser Ile Ser Ser Ile Gln		
290	295	300

Met	Val	Asp	Cys	Cys	Lys	Arg	Leu	Leu	Glu	Gln	Ser	Leu	Pro	Tyr	Leu
305					310					315					320
His	Gly	Met	His	Leu	Cys	Ile	Ser	His	Phe	Tyr	Ser	Val	Met	Gln	Asp
				325					330					335	
Gly	Asp	Leu	Cys	Ile	Pro	Trp	Asn	Trp	Lys	Asn	Gly	Glu	Ala	Ile	Lys
			340					345					350		

<210> 3590

&lt;211&gt; 115

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3590

[illegible]

&lt;210&gt; 3591

&lt;211&gt; 127

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3591

```

Met Ile Ser Ser Arg Met Pro Cys Leu Leu Val Leu Asn Ser Val Ser
 1             5             10             15
Phe Pro Leu Phe Leu Ala Val Tyr Tyr Trp Pro Ala Ser Leu Asp Gly
          20             25             30
Ala Ala Gly Met Val Gln Ile Asn Glu Gly His Thr Lys Val Ile Leu
          35             40             45
Leu Lys Ala His Val Gly Leu Arg Pro Glu Leu Thr Asp Thr Glu Met
          50             55             60
Ser Leu Ile Leu Cys Leu Phe His Cys Leu Trp Tyr Tyr Ser Ala Phe
 65             70             75             80
Thr Glu Glu Arg Val Leu Gly Asn Arg Asn Thr Arg Ile Ile Leu Val
          85             90             95
Gln Gln Leu Leu Ala Thr Pro Lys Phe Thr Tyr Phe Leu Pro Pro Ala
          100            105            110
Phe Phe Ile Asp Leu Ala Ala Ser Glu Ile Phe Ala Ala Ser Gln
          115            120            125

```

&lt;210&gt; 3592

&lt;211&gt; 161

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3592

```

Met His Gly Ser Lys Trp Leu Asp Ser Trp Val Gly Trp Gly Ser Gln
 1             5             10             15
Ser Arg Leu Pro Glu Gly Leu Glu Val Thr Pro Pro Gly Gly Asp Gly
          20             25             30
Ser Ser Gln Val Gly Cys His Gln Ser Arg Gln His Cys Leu Leu Gly
          35             40             45
Thr Pro Gly Glu Ala Asp Arg Val Ser Gly Phe Gln Leu Gly Gly Ser
          50             55             60
Pro Ala Glu Asn Pro Val Lys Pro Ala Phe His Ser Ser Pro Val Cys
 65             70             75             80

```

Pro Glu Pro Gly Leu Arg Ala Ala Leu Cys Met Pro Ala Leu Pro Thr  
                             85                            90                            95  
 Trp Gln Ser Ser Gly Gly Arg Thr Pro Arg Leu Ser Gly Asp Ser Gln  
                             100                            105                            110  
 Ala Asn Val Ser Ile Pro Gly Ser Ala Leu Ser Cys His Glu Phe Arg  
                             115                            120                            125  
 Lys Ala Glu Ala Ala Gln Gln Met Gly Thr Arg Gly Arg Thr Ala Ile  
                             130                            135                            140  
 His Ser Leu Ser Ser His Pro Gln Ala Cys Arg Ala Pro Gly Leu Trp  
 145                            150                            155                            160  
 Cys

<210> 3593

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3593

Met Pro Leu Gly Ala Gly Gly Leu Gly Arg Leu Ala Arg Gly Leu Thr  
   1                            5                            10                            15  
 Ser Gly Val Glu Gly Asn Gly Ile Lys Ala Thr Glu Phe Pro Gly Pro  
                             20                            25                            30  
 Gly Pro Glu Arg Tyr Pro Cys Leu His Leu Ala Leu Pro Cys Ala Trp  
                             35                            40                            45  
 Leu Ser Pro Ser Ser Trp Ala His Ser His Val Pro Pro Ile Thr Arg  
                             50                            55                            60  
 His Leu His Phe Cys Trp Cys Phe Trp Glu Ser Asp Leu Gln Thr Ala  
   65                            70                            75                            80  
 Ser Ala Ser Pro Gly Ser Leu Leu Ser Gly Ala Phe Ser Arg Thr Val  
                             85                            90                            95  
 Lys Gln Thr Leu Gly Ala Arg Pro Arg Asp Pro His Phe Lys Tyr Lys  
                             100                            105                            110  
 Val



&lt;210&gt; 3594

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3594

```

Met Gln Val Val Arg Glu Val Gly Glu Ser Gln Gln Ser Gln Ala Ser
 1             5             10             15
Pro Ser Ser His Ala Ile Gln Arg Ala Ile Leu Thr Pro Thr Val Pro
      20             25             30
Pro Leu Cys Asn Ser Thr Glu Ser Val Phe Arg Gln Trp Thr Ser Arg
      35             40             45
Ala Glu Asn Leu Pro His Val Thr His Leu Pro Ala Ala Val Glu Lys
      50             55             60
Gly Phe Ser Ser Ser Cys Thr Cys Gly Val Tyr Met Pro Asp Met Cys
      65             70             75             80
Pro Pro Leu Ser Ser Gly Gln Glu Ala Ser Gln Pro Val Gln Ile Val
      85             90             95
Thr Lys Phe Ser
      100

```

&lt;210&gt; 3595

&lt;211&gt; 418

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3595

```

Met Leu Glu Asn His Ile Leu His Lys Arg Ile Tyr Ile Leu Thr Phe
 1             5             10             15
Phe Ser Gln Gln Ile Phe Ile Leu Cys His Ala His Phe Ile Phe Phe
      20             25             30
Phe Thr Val Arg Asp Phe Cys Arg Gln Asp Glu Lys Cys Asp Tyr Tyr
      35             40             45

```

Phe Ser Val Asp Ala Asp Val Val Leu Thr Asn Pro Arg Thr Leu Lys  
 50 55 60  
 Ile Leu Ile Glu Gln Asn Arg Lys Ile Ile Ala Pro Leu Val Thr Arg  
 65 70 75 80  
 His Gly Lys Leu Trp Ser Asn Phe Trp Gly Ala Leu Ser Pro Asp Gly  
 85 90 95  
 Tyr Tyr Ala Arg Ser Glu Asp Tyr Val Asp Ile Val Gln Gly Asn Arg  
 100 105 110  
 Val Gly Val Trp Asn Val Pro Tyr Met Ala Asn Val Tyr Leu Ile Lys  
 115 120 125  
 Gly Lys Thr Leu Arg Ser Glu Met Asn Glu Arg Asn Tyr Phe Val Arg  
 130 135 140  
 Asp Lys Leu Asp Pro Asp Met Ala Leu Cys Arg Asn Ala Arg Glu Met  
 145 150 155 160  
 Thr Leu Gln Arg Glu Lys Asp Ser Pro Thr Pro Glu Thr Phe Gln Met  
 165 170 175  
 Leu Ser Pro Pro Lys Gly Val Phe Met Tyr Ile Ser Asn Arg His Glu  
 180 185 190  
 Phe Gly Arg Leu Leu Ser Thr Ala Asn Tyr Asn Thr Ser His Tyr Asn  
 195 200 205  
 Asn Asp Leu Trp Gln Ile Phe Glu Asn Pro Val Asp Trp Lys Glu Lys  
 210 215 220  
 Tyr Ile Asn Arg Asp Tyr Ser Lys Ile Phe Thr Glu Asn Ile Val Glu  
 225 230 235 240  
 Gln Pro Cys Pro Asp Val Phe Trp Phe Pro Ile Phe Ser Glu Lys Ala  
 245 250 255  
 Cys Asp Glu Leu Val Glu Glu Met Glu His Tyr Gly Lys Trp Ser Gly  
 260 265 270  
 Gly Lys His His Asp Ser Arg Ile Ser Gly Gly Tyr Glu Asn Val Pro  
 275 280 285  
 Thr Asp Asp Ile His Met Lys Gln Val Asp Leu Glu Asn Val Trp Leu  
 290 295 300  
 His Phe Ile Arg Glu Phe Ile Ala Pro Val Thr Leu Lys Val Phe Ala  
 305 310 315 320  
 Gly Tyr Tyr Thr Lys Gly Phe Ala Leu Leu Asn Phe Val Val Lys Tyr  
 325 330 335

Ser Pro Glu Arg Gln Arg Ser Leu Arg Pro His His Asp Ala Ser Thr  
                   340                  345                  350  
 Phe Thr Ile Asn Ile Ala Leu Asn Asn Val Gly Glu Asp Phe Gln Gly  
                   355                  360                  365  
 Gly Gly Cys Lys Phe Leu Arg Tyr Asn Cys Ser Ile Glu Ser Pro Arg  
                   370                  375                  380  
 Lys Gly Trp Ser Phe Met His Pro Gly Arg Leu Thr His Leu His Glu  
 385                  390                  395                  400  
 Gly Leu Pro Val Lys Asn Gly Thr Arg Tyr Ile Ala Val Ser Phe Ile  
                   405                  410                  415  
 Asp Pro

<210> 3596

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3596

Met Pro Val Leu Pro Pro Cys Val Leu Gln Val Arg Asp Glu Gln His  
   1                  5                  10                  15  
 Gln Cys Pro Leu Gly Asn Leu Lys Val Pro Leu Ser Gln Leu Leu Thr  
                   20                  25                  30  
 Ser Glu Asp Met Thr Val Ser Gln Arg Phe Gln Leu Gly Asn Ser Gly  
                   35                  40                  45  
 Pro Asn Ser Thr Ile Lys Met Lys Ile Ala Leu Arg Val Leu His Leu  
                   50                  55                  60  
 Glu Lys Arg Glu Arg Pro Pro Asp His Gln His Ser Ala Gln Val Lys  
                   65                  70                  75                  80  
 Arg Pro Ser Val Ser Lys Glu Gly Arg Lys Thr Ser Ile Lys Ser His  
                   85                  90                  95  
 Met Ser Gly Ser Pro Gly Pro Gly Gly Ser Asn Thr Ala Pro Ser Thr  
                   100                  105                  110  
 Pro Val Ile Gly Gly Ser Asp Lys Pro Gly Met Glu Glu Lys Ala Gln  
                   115                  120                  125

Pro Pro Glu Ala Gly Pro Gln Gly Leu His Asp Leu Gly Arg Ser Ser  
 130 135 140  
 Ser Ser Leu Leu Ala Ser Pro Gly His Ile Ser Val Lys Glu Pro Thr  
 145 150 155 160  
 Pro Ser Ile Ala Ser Asp Ile Ser Leu Pro Ile Ala Thr Gln Glu Leu  
 165 170 175  
 Arg Gln Arg Leu Arg Gln Leu Glu Asn Gly Thr Thr Leu Gly Gln Ser  
 180 185 190  
 Pro Leu Gly Gln Ile Gln Leu Thr Ile Gln His Ser Ser Gln Lys Gln  
 195 200 205  
 Ala Tyr Arg Gly Arg Ala Cys Leu Gln Lys Pro His Cys Leu Leu  
 210 215 220

<210> 3597

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3597

Met Asp Trp Thr Trp Arg Val Leu Cys Val Leu Ala Val Ala Pro Gly  
 1 5 10 15  
 Ala Arg Leu Gln Val Gln Leu Thr Gln Ser Gly Ala Ala Leu Lys Lys  
 20 25 30  
 Pro Gly Ala Ser Leu Lys Leu Ser Cys Arg Ala Ser Ala Asp Ser Ser  
 35 40 45  
 Ile Thr Tyr Asn Ile His Trp Leu Arg Arg Pro Pro Gly Gln Gly Phe  
 50 55 60  
 Glu Trp Leu Gly Lys Ile Asn Ser Arg Asp Ser Ile Thr Asn Ser Ala  
 65 70 75 80  
 Pro Arg Phe Gln Gly Ser Val Thr Met Thr Arg Asp Arg Ser Ser Ser  
 85 90 '95  
 Thr Phe Tyr Leu Asp Leu Arg Ser Leu Arg Ser Asp Asp Thr Ala Val  
 100 105 110  
 Tyr Tyr Cys Thr Arg Ser Ile Trp Pro Leu Asp Tyr Phe Asp Ser Trp  
 115 120 125

Gly Gln Gly Thr Gln Val Thr Val Ser Pro Ala Pro Thr Lys Ala Pro  
 130 135 140  
 Asp Val Phe Pro Ile Ile Ser Gly Cys Arg His Pro Lys Asp Asn Ser  
 145 150 155 160  
 Pro Val Val Leu Ala Cys Leu Ile Thr Gly Tyr His Pro Thr Ser Val  
 165 170 175  
 Thr Val Thr Trp Tyr Met Gly Thr Gln Ser Gln Pro Gln Arg Thr Phe  
 180 185 190  
 Pro Glu Ile Gln Arg Arg Asp Ser Tyr Tyr Met Thr Ser Ser Gln Leu  
 195 200 205  
 Ser Thr Pro Leu Gln Gln Trp Arg Gln Gly Glu Tyr Lys Cys Val Val  
 210 215 220  
 Gln His Thr Ala Ser Lys Ser Lys Lys Glu Ile Phe Arg Trp Pro Glu  
 225 230 235 240  
 Ser Pro Lys Ala Gln Ala Ser Ser Val Pro Thr Ala Gln Pro Gln Ala  
 245 250 255  
 Glu Gly Ser Leu Ala Lys Ala Thr Thr Ala Pro Ala Thr Thr Arg Asn  
 260 265 270  
 Thr Gly Arg Gly Gly Glu Glu Lys Lys Lys Glu Lys Glu Lys Glu Glu  
 275 280 285  
 Gln Glu Glu Arg Glu Thr Lys Thr Gln Ser Val Arg Ala Thr Pro Ser  
 290 295 300  
 Leu Leu Ala Ser Thr Cys  
 305 310

<210> 3598

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3598

Met Pro Thr Thr Pro Val Lys Ala Lys Arg Val Ser Thr Phe Gln Glu  
 1 5 10 15  
 Phe Glu Ser Asn Thr Ser Asp Ala Trp Asp Ala Gly Glu Asp Asp Asp  
 20 25 30

Glu Leu Leu Ala Met Ala Ala Glu Ser Leu Asn Ser Glu Val Val Met  
           35                          40                          45  
 Glu Thr Ala Asn Arg Val Leu Arg Asn His Ser Gln Arg Gln Gly Arg  
           50                          55                          60  
 Pro Thr Leu Gln Glu Gly Pro Gly Leu Gln Gln Lys Pro Arg Pro Glu  
           65                          70                          75                          80  
  
 Ala Glu Pro Pro Ser Pro Pro Ser Gly Asp Leu Arg Leu Val Lys Ser  
                           85                          90                          95  
 Val Ser Glu Ser His Thr Ser Cys Pro Ala Glu Ser Ala Ser Asp Ala  
           100                          105                          110  
 Ala Pro Leu Gln Arg Ser Gln Ser Leu Pro His Ser Ala Thr Val Thr  
           115                          120                          125  
 Leu Gly Gly Thr Ser Asp Pro Ser Thr Leu Ser Ser Ser Ala Leu Ser  
           130                          135                          140  
 Glu Arg Glu Ala Ser Arg Leu Asp Lys Phe Lys Gln Leu Leu Ala Gly  
   145                          150                          155                          160  
 Pro Asn Thr Asp Leu Glu Glu Leu Arg Arg Leu Ser Trp Ser Gly Ile  
                           165                          170                          175  
 Pro Lys Pro Val Arg Pro Met Thr Trp Lys Leu Leu Ser Gly Tyr Leu  
           180                          185                          190  
 Pro Ala Asn Val Asp Arg Arg Pro Ala Thr Leu Gln Arg Lys Gln Lys  
           195                          200                          205  
 Glu Tyr Phe Ala Phe Ile Glu His Tyr Tyr Asp Ser Arg Asn Asp Glu  
           210                          215                          220  
 Val His Gln Asp Thr Tyr Arg Gln Ile His Ile Asp Ile Pro Arg Met  
   225                          230                          235                          240  
 Ser Pro Glu Ala Leu Ile Leu Gln Pro Lys Val Thr Glu Ile Phe Glu  
                           245                          250                          255  
 Arg Ile Leu Phe Ile Trp Ala Ile Arg His Pro Ala Ser Gly Tyr Val  
           260                          265                          270  
 Gln Gly Ile Asn Asp Leu Val Thr Pro Phe Phe Val Val Phe Ile Cys  
           275                          280                          285  
 Glu Tyr Ile Ala Phe Pro Gly Cys Gly Arg Pro Gln Ile Pro Ile Leu  
           290                          295                          300  
 Ala Val Ile Trp Arg Asp Glu Pro Tyr Pro Arg Thr Asp Glu Gln Ile

305	310	315	320
Ile Leu Arg Arg			

&lt;210&gt; 3599

&lt;211&gt; 407

&lt;212&gt; PRT

<213> Homo sapiens

&lt;400&gt; 3599

Met	Asn	Met	Ile	Trp	Arg	Asn	Ser	Ile	Ser	Cys	Leu	Arg	Leu	Gly	Lys
1						5				10					15
Val	Pro	His	Arg	Tyr	Gln	Ser	Gly	Tyr	His	Pro	Val	Ala	Pro	Leu	Gly
					20					25				30	
Ser	Arg	Ile	Leu	Thr	Asp	Pro	Ala	Lys	Val	Phe	Glu	His	Asn	Met	Trp
					35					40				45	
Asp	His	Met	Gln	Trp	Ser	Lys	Glu	Glu	Glu	Ala	Ala	Ala	Arg	Lys	Lys
					50					55				60	
Val	Lys	Glu	Asn	Ser	Ala	Val	Arg	Val	Leu	Leu	Glu	Glu	Gln	Val	Lys
65						70					75				80
Tyr	Glu	Arg	Glu	Ala	Ser	Lys	Tyr	Trp	Asp	Thr	Phe	Tyr	Lys	Ile	His
						85					90				95
Lys	Asn	Lys	Phe	Phe	Lys	Asp	Arg	Asn	Trp	Leu	Leu	Arg	Glu	Phe	Pro
						100					105			110	
Glu	Ile	Leu	Pro	Val	Asp	Gln	Lys	Pro	Glu	Glu	Lys	Ala	Arg	Glu	Ser
						115								120	
Ser	Trp	Asp	His	Val	Lys	Thr	Ser	Ala	Thr	Asn	Arg	Phe	Ser	Arg	Met
						130								135	
His	Cys	Pro	Thr	Val	Pro	Asp	Glu	Lys	Asn	His	Tyr	Glu	Lys	Ser	Ser
145						150					155				160
Gly	Ser	Ser	Glu	Gly	Gln	Ser	Lys	Thr	Glu	Ser	Asp	Phe	Ser	Asn	Leu
						165								170	
Asp	Ser	Glu	Lys	His	Lys	Lys	Gly	Pro	Met	Glu	Thr	Gly	Leu	Phe	Pro
						180								185	
Gly	Ser	Asn	Ala	Thr	Phe	Arg	Ile	Leu	Glu	Val	Gly	Cys	Gly	Ala	Gly

195	200	205
Asn Ser Val Phe Pro Ile Leu	Asn Thr Leu Glu Asn Ser Pro Glu Ser	
210	215	220
Phe Leu Tyr Cys Cys Asp Phe Ala Ser Gly Ala Val Glu Leu Val Lys		
225	230	235
Ser His Ser Ser Tyr Arg Ala Thr Gln Cys Phe Ala Phe Val His Asp		
245	250	255
Val Cys Asp Asp Gly Leu Pro Tyr Pro Phe Pro Asp Gly Ile Leu Asp		
260	265	270
Val Ile Leu Leu Val Phe Val Leu Ser Ser Ile His Pro Asp Arg Met		
275	280	285
Gln Gly Val Val Asn Arg Leu Ser Lys Leu Leu Lys Pro Gly Gly Met		
290	295	300
Leu Leu Phe Arg Asp Tyr Gly Arg Tyr Asp Lys Thr Gln Leu Arg Phe		
305	310	315
Lys Lys Gly His Cys Leu Ser Glu Asn Phe Tyr Val Arg Gly Asp Gly		
325	330	335
Thr Arg Ala Tyr Phe Phe Thr Lys Gly Glu Val His Ser Met Phe Cys		
340	345	350
Lys Ala Ser Leu Asp Glu Lys Gln Asn Leu Val Asp Arg Arg Leu Gln		
355	360	365
Val Asn Arg Lys Lys Gln Val Lys Met His Arg Val Trp Ile Gln Gly		
370	375	380
Lys Phe Gln Lys Pro Leu His Gln Thr Gln Asn Ser Ser Asn Met Val		
385	390	395
Ser Thr Leu Leu Ser Gln Asp		400
405		

&lt;210&gt; 3600

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3600

Met Val Cys Pro Glu Phe Val Pro Ser Asp Val Gln Met Cys Leu Glu



1	5	10	15												
Phe	Leu	Pro	Ser	Gly	Gly	Phe	Val	Val	Ser	Leu	Asp	Phe	Arg	Ser	Glu
	20		25		30										
Ala	Thr	Glu	Leu	Cys	Ser	Val	Thr	Ala	Leu	Lys	Gly	Ala	Arg	Leu	Glu
	35		40		45										
Leu	Leu	Val	Pro	Pro	Asp	Gly	Phe	Val	Ala	Leu	Leu	Thr	Ser	Gly	Met
	50		55		60										
Lys	Pro	Gln	Thr	Leu	Thr	Val	Ser	Val	Thr	Ala	His	Lys	Gly	Ser	Ala
65			70		75										80
Asp	Pro	Glu	Glu	Ala	Ala	Ala	Lys	Phe	Ile	Val	Lys	Ser	Lys	Arg	Thr
			85		90										95
Lys	Leu	Pro	Gln	His	Glu	Thr	Ala	Pro	Gln	Arg	Ile	Ala	Thr	Ala	Ala
	100		105		110										
Trp	Val	Ala	Ser	Phe	Tyr	Ser	Leu	Thr	Trp	Pro	His	Pro	His	Pro	Ala
	115		120		125										
Asp	Trp	Ser	Ile	Leu	Gln	Arg	Gly	Asp	Trp	Ser	Val	Phe	Thr	Gln	Cys
	130		135		140										

&lt;210&gt; 3601

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3601

Met	Gln	Ser	Leu	Pro	Thr	Ala	Pro	Ser	Phe	Gly	Val	Ser	Thr	Gly	Leu
1	5		10		15										
Leu	Ala	Ala	Ala	Ala	Phe	Tyr	Gln	Thr	Ser	Gln	Pro	Pro	Ser	Pro	Pro
	20		25		30										
Leu	Gly	Ser	Ser	Ser	Pro	Thr	Trp	Pro	Ala	Arg	Val	Thr	Leu	Lys	Tyr
	35		40		45										
Lys	Ser	Asp	Pro	Asn	Thr	Ser	Leu	Leu	Lys	Thr	His	Gln	Val	Leu	Pro
	50		55		60										
Pro	His	Ser	Met	Gln	Cys	Lys	Ser	Ser	Pro	Trp	Ser	Ser	Ser	Ile	Ser
65			70		75										80
Pro	Ser	Pro	Ser	Ala	Ser	Ser	Leu	Pro	His	Leu	Leu	Leu	Ser	Ser	Tyr

	85		90		95										
Thr	Gly	Leu	Cys	Cys	Thr	Trp	Asp	Met	Pro	Ser	Lys	Thr	Gln	Pro	Trp
	100							105					110		
Gly	Leu	Cys	Ser	Arg	Pro	Leu	Pro	Gly	Cys	Ser	Ser	Pro	Ser	Tyr	Pro
	115							120					125		
Gln	Val	Trp	Leu	Pro	Asp	Phe	Ile	Gln	Arg	Pro	Pro	Ser	Gln	Glu	Asp
	130							135					140		
Thr	Leu	Asp	Cys	Phe	Val										
145															150

&lt;210&gt; 3602

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3602

Met	Gly	Ser	Ser	Leu	Gly	Leu	Cys	Leu	Gly	Lys	Ala	Pro	Ser	Ser	Ser
1				5					10					15	
Gln	Leu	Phe	Leu	Phe	Phe	Ala	Met	Gly	Ser	Asp	Val	Gln	Pro	Gly	Thr
		20						25					30		
Glu	Met	Glu	Ile	Val	Val	Glu	Glu	Thr	Ile	Ser	Val	Arg	Asp	Cys	Leu
	35						40					45			
Lys	Leu	Met	Leu	Lys	Lys	Ser	Gly	Leu	Gln	Gly	Asp	Ala	Trp	His	Leu
	50					55					60				
Arg	Lys	Met	Asp	Trp	Cys	Tyr	Glu	Ala	Gly	Glu	Pro	Leu	Cys	Glu	Glu
65				70					75					80	
Asp	Ala	Thr	Leu	Lys	Glu	Leu	Leu	Ile	Cys	Ser	Gly	Asp	Thr	Leu	Leu
			85					90					95		
Leu	Ile	Glu	Gly	Gln	Leu	Pro	Pro	Leu	Gly	Phe	Leu	Lys	Val	Pro	Ile
	100							105					110		
Trp	Trp	Tyr	Gln	Leu	Gln	Gly	Pro	Ser	Gly	His	Trp	Glu	Ser	His	Gln
	115							120					125		
Asp	Gln	Thr	Asn	Cys	Thr	Ser	Ser	Trp	Gly	Arg	Val	Trp	Arg	Ala	Thr
	130							135					140		

Ser Ser Gln Gly Glu Asn Arg Met Gly Phe Gln Gln Pro Val His His  
 145                      150                      155                      160  
 Lys Glu Lys

<210> 3603

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3603

Met Val Thr Lys Trp Trp Gly Gln Asp Pro Pro Val Gln Leu Arg Ser  
 1                      5                      10                      15  
 Gln Leu Met Leu Trp Ile Met Glu Leu Ile Leu Trp Lys Phe Gln Ser  
 20                      25                      30  
 Ser Val Val Gly Ser Ser Val Val Thr Trp Lys Ile Ser Asp Val Ala  
 35                      40                      45  
 Gly Pro His Gly Asp His Ser Cys Ser Leu Gln His Leu Glu Gln Ile  
 50                      55                      60  
 Ile Gly Ser Val Ser Asn Tyr Pro Arg Tyr Thr Gly Ser Arg Ser Cys  
 65                      70                      75                      80  
 Asp Arg Gly Glu Asn Pro Val Ser Leu Ser Lys Arg Ile Lys Cys Thr  
 85                      90                      95  
 Trp Met Leu Gly Ala Ser Gly Phe Pro Pro Arg Cys Pro Ser Gly Arg  
 100                      105                      110  
 Asp His Ser Arg Asp His Pro Gly Lys Ser Gln Val Pro Ala Leu Glu  
 115                      120                      125  
 Leu Ala Asn Gln Leu Ala Ala Trp Gly Leu Trp Ser Ser Val Val Lys  
 130                      135                      140  
 Ser Trp Gly Phe Arg Ala Gly Glu Thr Glu Ala Pro Ile Ser Ala Leu  
 145                      150                      155                      160  
 Ser Ser Ala His Ala  
 165

&lt;210&gt; 3604

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3604

```

Met Val Ser Cys Asp Cys Gly Val Cys Glu Ser Arg Ser Ile Leu Val
  1             5             10             15
Leu Cys Ala Ser Leu Phe Ala Val Leu Gly Gly Leu Ala Arg Phe Arg
             20             25             30
Ile Arg Gly Thr Gly Gly Leu Glu Arg Gly Met Arg Trp Pro Ser Arg
             35             40             45
Ala Arg Arg Met Thr Ala Asn Trp Cys Leu Gly Gly Leu Ser Arg Arg
             50             55             60
Asn Cys Gly Ala Arg Ala Ala Leu Cys Pro Leu Pro Arg Ser Asn Leu
             65             70             75             80
Trp Arg Pro Phe Thr Ala Leu Ala Leu Val Gly Ser Arg Gly Lys Glu
             85             90             95
Phe Gly Asn Val Trp Leu Cys Val Thr Met Lys
             100             105

```

&lt;210&gt; 3605

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3605

```

Met Cys Glu Leu Asp Ile Leu His Asp Ser Leu Tyr Gln Phe Cys Pro
  1             5             10             15
Glu Leu His Leu Lys Arg Leu Asn Ser Leu Thr Leu Ala Cys His Ala
             20             25             30
Leu Leu Asp Cys Lys Thr Leu Thr Leu Thr Glu Leu Gly Arg Asn Leu
             35             40             45
Pro Thr Lys Ala Arg Thr Lys His Asn Ile Lys Arg Ile Asp Arg Leu
             50             55             60

```

Leu Gly Asn Arg His Leu His Lys Glu Arg Leu Ala Val Tyr Arg Trp  
 65 70 75 80  
 His Ala Ser Phe Ile Cys Ser Gly Asn Thr Met Pro Ile Val Leu Val  
 85 90 95  
 Asp Trp Ser Asp Ile Arg Glu Gln Lys Arg Leu Met Val Leu Arg Ala  
 100 105 110  
 Ser Val Ala Leu His Gly Arg Ser Val Thr Leu Tyr Glu Lys Ala Phe  
 115 120 125  
 Pro Leu Ser Glu Gln Cys Ser Lys Lys Ala His Asp Gln Phe Leu Ala  
 130 135 140  
 Asp Leu Ala Ser Ile Leu Pro Ser Asn Thr Thr Pro Leu Ile Val Ser  
 145 150 155 160  
 Asp Ala Gly Phe Lys Val Pro Trp Tyr Lys Ser Val Glu Lys Leu Gly  
 165 170 175  
 Trp Tyr Trp Leu Ser Arg Val Arg Gly Lys Val Gln Tyr Ala Asp Leu  
 180 185 190  
 Gly Ala Glu Asn Trp Lys Pro Ile Ser Asn Leu His Asp Met Ser Ser  
 195 200 205  
 Ser His Ser Lys Thr Leu Gly Tyr Lys Arg Leu Thr Lys Ser Asn Pro  
 210 215 220  
 Ile Ser Cys Gln Ile Leu Leu Tyr Lys Ser Arg Ser Lys Gly Arg Lys  
 225 230 235 240  
 Asn Gln Arg Ser Thr Arg Thr His Cys His His Pro Ser Pro Lys Ile  
 245 250 255  
 Tyr Ser Ala Ser Ala Lys Glu Pro Trp Val Leu Ala Thr Asn Leu Pro  
 260 265 270  
 Val Glu Ile Arg Thr Pro Lys Gln Leu Val Asn Ile Tyr Ser Lys Arg  
 275 280 285  
 Met Gln Ile Glu Glu Thr Phe Arg Asp Leu Lys Ser Pro Ala Tyr Gly  
 290 295 300  
 Leu Gly Leu Arg His Ser Arg Thr Ser Ser Ser Glu Arg Phe Asp Ile  
 305 310 315 320  
 Met Leu Leu Ile Ala Leu Met Leu Gln Leu Thr Cys Trp Leu Ala Gly  
 325 330 335  
 Val His Ala Gln Lys Gln Gly Trp Asp Lys His Phe Gln Ala Asn Thr  
 340 345 350

Val Arg Asn Arg Asn Val Leu Ser Thr Val Arg Leu Gly Met Glu Val  
 355 360 365  
 Leu Arg His Ser Gly Tyr Thr Ile Thr Arg Glu Asp Leu Leu Val Ala  
 370 375 380  
 Ala Thr Leu Leu Ala Gln Asn Leu Phe Thr His Gly Tyr Ala Leu Gly  
 385 390 395 400  
 Lys Leu

<210> 3606

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3606

Met Leu Ser Leu Leu Phe Leu Cys Thr Leu His Leu Ser Leu Ser Leu  
 1 5 10 15  
 Pro Ser Leu Arg Leu Thr Leu Thr Pro Ile Arg Leu Ser Ser Leu Pro  
 20 25 30  
 Gly Leu Cys Cys Arg Lys Val Pro Gly Thr Ala Leu Ile Thr Ser Ala  
 35 40 45  
 Lys Leu Phe Leu Met Ile Tyr Phe Leu Ser Thr Pro Pro Leu Leu Thr  
 50 55 60  
 Leu Phe Asn Ile Leu Met Thr Phe Phe Phe Val Ala Pro Pro Leu Asn  
 65 70 75 80  
 Leu Leu Asn Lys Thr Tyr Phe Cys Ser Phe Ser Ile Tyr Ser Pro Lys  
 85 90 95  
 Asp Ile Gly Tyr Pro Pro Pro Lys Leu Lys Phe Leu Leu His Pro Leu  
 100 105 110  
 Pro Thr Ser Ala  
 115

<210> 3607

<211> 217

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3607

```

Met Thr Phe Ser Arg Cys Gln Leu Pro Cys Gln Pro Arg Ser Pro Met
  1             5             10            15
Glu Thr Val Glu Thr Asn Trp Asp His Val Ser Arg Trp Lys Lys Gly
      20             25            30
Gly Arg Gly Arg Gly Asp His Tyr Cys Gln Val Ile Gln Lys Arg Ala
      35             40            45
Glu Pro Pro Ala Leu Arg Arg Glu Thr Leu Asp Ser Gln Gly Asp Ser
      50             55            60
Gly Lys Gly Asp Ser Ala Gln Thr Pro Ser Val Pro Glu Ala Asn Ser
      65             70            75            80
Trp Lys Thr Gly Ala Arg Ala Asn Leu Asn Lys Asn Gly Gly Gly Lys
      85             90            95
Gly Gly Lys Glu Gly Ser Cys Glu Leu Pro Glu Val Gly Gln Gly Ala
      100            105            110
Pro Gln Arg Met Gly Cys Tyr Glu Ser Glu Asn Met Ala Thr His Pro
      115            120            125
Ala Ser Phe Ile Tyr Tyr Gln Pro Pro Gln Asn Trp Cys Leu Lys Thr
      130            135            140
Ile Ile Ile Tyr Val Met Ser Leu Cys Gly Glu Leu Gly Gly Pro Ser
      145            150            155            160
Ala Ser Pro Ser Leu Ala Val Ser Ala Val Thr Gly Asp Trp Pro Gly
      165            170            175
Leu Ala Ser Leu Pro Gly Ser Cys Pro Gly Arg Gly Gly Cys Leu Leu
      180            185            190
Ser Ala Glu Thr Val Ser Arg Ser Ile Ser Thr Ser Pro His Arg Thr
      195            200            205
Ser Ser Cys Thr Thr Gly Ile Ser Ala
      210            215

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&lt;210&gt; 3608

&lt;211&gt; 777

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3608

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Met Leu Asp Met Ser Phe Lys Asp Ala Glu Arg Gly Asp Asp Thr Ser
  1             5             10            15
Cys Glu Asn Leu Leu Asp Ala Phe Ser Ile Lys Leu Ser Glu Thr His
      20             25            30

Gly Tyr Gly Val Gln Glu Glu Phe Thr Glu Glu Asn Lys Leu Leu Glu
      35             40            45
Ala Cys Ile Phe Lys Asn Asn Glu Leu Leu Lys Asn Ile Gln Asp Val
      50             55            60
Gln Ser Gln Ile Ser Lys Ile Gly Leu Lys Asp Pro Thr Val Pro Ala
      65             70            75            80
Val Lys His Arg Lys Lys Ser Leu Ile Arg Leu Asp Lys Val Leu Asp
      85             90            95
Glu Tyr Glu Glu Glu Lys Arg His Leu Gln Glu Met Ala Asn Ser Leu
      100            105            110
Pro His Phe Lys Asp Gly Arg Glu Lys Thr Val Asn Gln Gln Cys Gln
      115            120            125
Asn Thr Val Val Leu Trp Glu Asn Thr Lys Ala Leu Val Thr Glu Cys
      130            135            140
Leu Glu Gln Cys Gly Arg Val Leu Glu Leu Leu Lys Gln Tyr Gln Asn
      145            150            155            160
Phe Lys Ser Ile Leu Thr Thr Leu Ile Gln Lys Glu Glu Ser Val Ile
      165            170            175
Ser Leu Gln Ala Ser Tyr Met Gly Lys Glu Asn Leu Lys Lys Arg Ile
      180            185            190
Ala Glu Ile Glu Ile Val Lys Glu Glu Phe Asn Glu His Leu Glu Val
      195            200            205
Val Asp Lys Ile Asn Gln Val Cys Lys Asn Leu Gln Phe Tyr Leu Asn
      210            215            220
Lys Met Lys Thr Phe Glu Glu Pro Pro Phe Glu Lys Glu Ala Asn Ile
      225            230            235            240
Ile Val Asp Arg Trp Leu Asp Ile Asn Glu Lys Thr Glu Asp Tyr Tyr

```



	245	250	255
Glu Asn Leu Gly Arg Ala Leu Ala Leu Trp Asp Lys Leu Phe Asn Leu			
	260	265	270
Lys Asn Val Ile Asp Glu Trp Thr Glu Lys Ala Leu Gln Lys Met Glu			
	275	280	285
Leu His Gln Leu Thr Glu Glu Asp Arg Glu Arg Leu Lys Glu Glu Leu			
	290	295	300
Gln Val His Glu Gln Lys Thr Ser Glu Phe Ser Arg Arg Val Ala Glu			
305	310	315	320
Ile Gln Phe Leu Leu Gln Ser Ser Glu Ile Pro Leu Glu Leu Gln Val			
	325	330	335
Met Glu Ser Ser Ile Leu Asn Lys Met Glu His Val Gln Lys Cys Leu			
	340	345	350
Thr Gly Glu Ser Asn Cys His Ala Leu Ser Gly Ser Thr Ala Glu Leu			
	355	360	365
Arg Glu Asp Leu Asp Gln Ala Lys Thr Gln Ile Gly Met Thr Glu Ser			
	370	375	380
Leu Leu Lys Ala Leu Ser Pro Ser Asp Ser Leu Glu Ile Phe Thr Lys			
385	390	395	400
Leu Glu Glu Ile Gln Gln Gln Ile Leu Gln Gln Lys His Ser Met Ile			
	405	410	415
Leu Leu Glu Asn Gln Ile Gly Cys Leu Thr Pro Glu Leu Ser Glu Leu			
	420	425	430
Lys Lys Gln Tyr Glu Ser Val Ser Asp Leu Phe Asn Thr Lys Lys Ser			
	435	440	445
Val Leu Gln Asp His Phe Ser Lys Leu Leu Asn Asp Gln Cys Lys Asn			
	450	455	460
Phe Asn Asp Trp Phe Ser Asn Ile Lys Val Asn Leu Lys Glu Cys Phe			
465	470	475	480
Glu Ser Ser Glu Thr Lys Lys Ser Val Glu Gln Lys Leu Gln Lys Leu			
	485	490	495
Ser Asp Phe Leu Thr Leu Glu Gly Arg Asn Ser Lys Ile Lys Gln Val			
	500	505	510
Asp Ser Val Leu Lys His Val Lys Lys His Leu Pro Lys Ala His Val			
	515	520	525
Lys Glu Leu Ile Ser Trp Leu Val Gly Gln Glu Phe Glu Leu Glu Lys			

530	535	540	
Met Glu Ser Ile Cys Gln Ala Arg Ala Lys Glu Leu Glu Asp Ser Leu			
545	550	555	560
Gln Gln Leu Leu Arg Leu Gln Asp Asp His Arg Asn Leu Arg Lys Trp			
	565	570	575
Leu Thr Asn Gln Glu Glu Lys Trp Lys Gly Thr Glu Glu Pro Gly Glu			
	580	585	590
Lys Thr Glu Leu Phe Cys Gln Ala Leu Ala Arg Lys Arg Glu Gln Phe			
	595	600	605
Glu Ser Val Ala Gln Leu Asn Asn Ser Leu Lys Glu Tyr Gly Phe Thr			
	610	615	620
Glu Glu Glu Glu Ile Ile Met Glu Ala Thr Cys Leu Met Asp Arg Tyr			
625	630	635	640
Gln Thr Leu Leu Arg Gln Leu Ser Glu Ile Glu Glu Glu Asp Lys Leu			
	645	650	655
Leu Pro Thr Glu Asp Gln Ser Phe Asn Asp Leu Ala His Gly Val Ile			
	660	665	670
His Trp Ile Lys Glu Ile Lys Glu Ser Leu Met Val Leu Asn Ser Ser			
	675	680	685
Glu Gly Lys Met Pro Leu Glu Glu Arg Ile Gln Lys Ile Lys Glu Ile			
	690	695	700
Ile Leu Leu Lys Pro Glu Gly Asp Ala Arg Ile Glu Thr Ile Thr Lys			
705	710	715	720
Gln Ala Glu Ser Ser Glu Ala Pro Leu Val Gln Lys Thr Leu Thr Asp			
	725	730	735
Ile Ser Asn Gln Trp Asp Asn Thr Leu His Leu Ala Ser Thr Tyr Leu			
	740	745	750
Ser His Gln Glu Lys Leu Leu Leu Glu Gly Glu Lys Tyr Leu Gln Ser			
	755	760	765
Lys Glu Asp Leu Arg Leu Met Leu Ile			
	770	775	

&lt;210&gt; 3609

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3609

Met Leu Glu Asp Ile Ala Ser Pro Arg Pro Pro Ala Glu Gly Phe Ile  
 1 5 10 15  
 Asp Glu Thr Pro Asn Phe Ile Ile Pro Ala Gln Arg Ala Glu Pro Met  
 20 25 30  
 Arg Ile Val Arg Gln Pro Thr Pro Pro Gly Asp Leu Glu Pro Pro  
 35 40 45  
 Phe Gln Pro Ser Ala Leu Pro Ala Asp Pro Leu Glu Ser Pro Pro Thr  
 50 55 60  
 Ala Pro Asp Pro Ala Leu Glu Leu Pro Ser Thr Pro Pro Pro Ser Ser  
 65 70 75 80  
 Leu Leu Arg Pro Arg Leu Ser Pro Trp Gly Leu Ala Pro Leu Phe Arg  
 85 90 95  
 Ser Val Arg Ser Lys Leu Glu Ser Phe Ala Asp Ile Phe Leu Thr Pro  
 100 105 110  
 Asn Lys Thr Pro Gln Pro Pro Pro Pro Ser Pro Pro Met Lys Leu Glu  
 115 120 125  
 Leu Lys Ile Ala Ile Ser Glu Ala Glu Gln Ser Gly Ala Ala Glu Gly  
 130 135 140  
 Thr Ala Ser Val Ser Pro Arg Pro Pro Ile Arg Gln Trp Arg Thr Gln  
 145 150 155 160  
 Asp His Asn Thr Pro Ala Leu Leu Pro Lys Pro Ser Leu Gly Arg Ser  
 165 170 175  
 Tyr Ser Cys Pro Asp Leu Gly Pro Pro Gly Pro Gly Thr Cys Thr Trp  
 180 185 190  
 Pro Pro Ala Pro Pro Gln Pro Ser Arg Pro Arg Pro Arg Arg His Thr  
 195 200 205  
 Val Gly Gly Gly Glu Met Ala Arg Ala Pro Pro Pro Pro Arg Pro Cys  
 210 215 220  
 Leu Arg Lys Glu Val Phe Pro Leu Gly Gly Val Gly Ala Ser Pro Ser  
 225 230 235 240  
 Leu Thr Thr Ser Cys Ser Ser Thr Ala Ser Thr Ser Phe Ser Gly Pro  
 245 250 255  
 Ala Glu Pro Arg Glu Gly Ala Lys Ser Leu Lys Gly Pro Gly Ala Phe

260 265 270  
Arg Thr

<210> 3610

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3610

Met Asp Asn Arg Gln Asn Val Thr Pro Ala Leu Ile Phe Ala Ile Thr  
1 5 10 15  
Val Ala Thr Ile Gly Ser Phe Gln Phe Gly Tyr Asn Thr Gly Val Ile  
20 25 30  
Asn Ala Pro Glu Thr Ile Ile Lys Glu Phe Ile Asn Lys Thr Leu Thr  
35 40 45  
Asp Lys Ala Asn Ala Pro Pro Ser Glu Val Leu Leu Thr Asn Leu Trp  
50 55 60  
Ser Leu Ser Val Ala Ile Phe Ser Val Gly Gly Met Ile Gly Ser Phe  
65 70 75 80  
Ser Val Gly Leu Phe Val Asn Arg Phe Gly Arg Arg Asn Ser Met Leu  
85 90 95  
Ile Val Asn Leu Leu Ala Ala Thr Gly Gly Cys Leu Met Gly Leu Cys  
100 105 110  
Lys Ile Ala Glu Ser Val Glu Met Leu Ile Leu Gly Arg Leu Val Ile  
115 120 125  
Gly Leu Phe Cys Gly Leu Cys Thr Gly Phe Val Pro Met Tyr Ile Gly  
130 135 140  
Glu Ile Ser Pro Thr Ala Leu Arg Gly Ala Phe Gly Thr Leu Asn Gln  
145 150 155 160  
Leu Gly Ile Val Ile Gly Ile Leu Val Ala Gln Ile Phe Gly Leu Glu  
165 170 175  
Leu Ile Leu Gly Ser Glu Glu Leu Trp Pro Val Leu Leu Gly Phe Thr  
180 185 190  
Ile Leu Pro Ala Ile Leu Gln Ser Ala Ala Leu Pro Cys Cys Pro Glu

195	200	205
Ser Pro Arg Phe Leu Leu Ile Asn Arg Lys Lys Glu Glu Asn Ala Thr		
210	215	220
Arg Ile Leu Gln Arg Leu Trp Gly Thr Gln Asp Val Ser Gln Asp Ile		
225	230	235
Gln Glu Met Lys Asp Glu Ser Ala Arg Met Ser Gln Glu Lys Gln Val		
245	250	255
Thr Val Leu Glu Leu Phe Arg Val Ser Ser Tyr Arg Gln Pro Ile Ile		
260	265	270
Ile Ser Ile Val Leu Gln Leu Ser Gln Gln Leu Ser Gly Ile Asn Ala		
275	280	285
Val Phe Tyr Tyr Ser Thr Gly Ile Phe Lys Asp Ala Gly Val Gln Gln		
290	295	300
Pro Ile Tyr Ala Thr Ile Ser Ala Gly Val Val Asn Thr Ile Phe Thr		
305	310	315
Leu Leu Ser Leu Phe Leu Val Glu Arg Ala Gly Arg Arg Thr Leu His		
325	330	335
Met Ile Gly Leu Gly Gly Met Ala Phe Cys Ser Thr Leu Met Thr Val		
340	345	350
Ser Leu Leu Leu Lys Asn His Tyr Asn Gly Met Ser Phe Val Cys Ile		
355	360	365
Gly Ala Ile Leu Val Phe Val Ala Cys Phe Glu Ile Gly Pro Gly Pro		
370	375	380
Ile Pro Trp Phe Ile Val Ala Glu Leu Phe Ser Gln Gly Pro Arg Pro		
385	390	395
Ala Ala Met Ala Val Ala Gly Cys Ser Asn Trp Thr Ser Asn Phe Leu		
405	410	415
Val Gly Leu Leu Phe Pro Ser Ala Ala Tyr Tyr Leu Gly Ala Tyr Val		
420	425	430
Phe Ile Ile Phe Thr Gly Phe Leu Ile Thr Phe Leu Ala Phe Thr Phe		
435	440	445
Phe Lys Val Pro Glu Thr Arg Gly Arg Thr Phe Glu Asp Ile Thr Arg		
450	455	460
Ala Phe Glu Gly Gln Ala His Gly Ala Asp Arg Ser Gly Lys Asp Gly		
465	470	475
Val Met Gly Met Asn Ser Ile Glu Pro Ala Lys Glu Thr Thr Thr Asn		

485 490 495  
 Val  
  
 <210> 3611  
 <211> 888  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 3611  
 Met Leu Leu Asn Gly Asp Cys Pro Glu Ser Leu Lys Lys Glu Ala Ala  
   1                  5                  10                  15  
 Ala Ala Glu Pro Pro Arg Glu Asn Gly Leu Asp Glu Ala Gly Pro Gly  
                   20                  25                  30  
 Asp Glu Thr Thr Gly Gln Glu Val Ile Val Ile Gln Asp Thr Gly Phe  
           35                  40                  45  
 Ser Val Lys Ile Leu Ala Pro Gly Ile Glu Pro Phe Ser Leu Gln Val  
       50                  55                  60  
 Ser Pro Gln Glu Met Val Gln Glu Ile His Gln Val Leu Met Asp Arg  
   65                  70                  75                  80  
 Glu Asp Thr Cys His Arg Thr Cys Phe Ser Leu His Leu Asp Gly Asn  
                   85                  90                  95  
 Val Leu Asp His Phe Ser Glu Leu Arg Ser Val Glu Gly Leu Gln Glu  
           100                  105                  110  
 Gly Ser Val Leu Arg Val Val Glu Glu Pro Tyr Thr Val Arg Glu Ala  
           115                  120                  125  
 Arg Ile His Val Arg His Val Arg Asp Leu Leu Lys Ser Leu Asp Pro  
       130                  135                  140  
 Ser Asp Ala Phe Asn Gly Val Asp Cys Asn Ser Leu Ser Phe Leu Ser  
   145                  150                  155                  160  
 Val Phe Thr Asp Gly Asp Leu Gly Asp Ser Gly Lys Arg Lys Lys Gly  
           165                  170                  175  
 Leu Glu Met Asp Pro Ile Asp Cys Thr Pro Pro Glu Tyr Ile Leu Pro  
           180                  185                  190  
 Gly Ser Arg Glu Arg Pro Leu Cys Pro Leu Gln Pro Gln Asn Arg Asp

195	200	205
Trp Lys Pro Leu Gln Cys Leu Lys Val Leu Thr Thr Ser Gly Trp Asn		
210	215	220
Pro Pro Pro Gly Asn Arg Lys Met His Gly Asp Leu Met Tyr Leu Phe		
225	230	235
Val Ile Thr Ala Glu Asp Arg Gln Val Ser Ile Thr Ala Ser Thr Arg		
245	250	255
Gly Phe Tyr Leu Asn Gln Ser Thr Ala Tyr His Phe Asn Pro Lys Pro		
260	265	270
Ala Ser Pro Arg Phe Leu Ser His Ser Leu Val Glu Leu Leu Asn Gln		
275	280	285
Ile Ser Pro Thr Phe Lys Lys Asn Phe Ala Val Leu Gln Lys Lys Arg		
290	295	300
Val Gln Arg His Pro Phe Glu Arg Ile Ala Thr Pro Phe Gln Val Tyr		
305	310	315
Ser Trp Thr Ala Pro Gln Ala Glu His Ala Met Asp Cys Val Arg Ala		
325	330	335
Glu Asp Ala Tyr Thr Ser Arg Leu Gly Tyr Glu Glu His Ile Pro Gly		
340	345	350
Gln Thr Arg Asp Trp Asn Glu Glu Leu Gln Thr Thr Arg Glu Leu Pro		
355	360	365
Arg Lys Asn Leu Pro Glu Arg Leu Leu Arg Glu Arg Ala Ile Phe Lys		
370	375	380
Val His Ser Asp Phe Thr Ala Ala Ala Thr Arg Gly Ala Met Ala Val		
385	390	395
Ile Asp Gly Asn Val Met Ala Ile Asn Pro Ser Glu Glu Thr Lys Met		
405	410	415
Gln Met Phe Ile Trp Asn Asn Ile Phe Phe Ser Leu Gly Phe Asp Val		
420	425	430
Arg Asp His Tyr Lys Asp Phe Gly Gly Asp Val Ala Ala Tyr Val Ala		
435	440	445
Pro Thr Asn Asp Leu Asn Gly Val Arg Thr Tyr Asn Ala Val Asp Val		
450	455	460
Glu Gly Leu Tyr Thr Leu Gly Thr Val Val Val Asp Tyr Arg Gly Tyr		
465	470	475
Arg Val Thr Ala Gln Ser Ile Ile Pro Gly Ile Leu Glu Arg Asp Gln		

	485		490		495										
Glu	Gln	Ser	Val	Ile	Tyr	Gly	Ser	Ile	Asp	Phe	Gly	Lys	Thr	Val	Val
	500						505							510	
Ser	His	Pro	Arg	Tyr	Leu	Glu	Leu	Leu	Glu	Arg	Thr	Ser	Arg	Pro	Leu
	515						520							525	
Lys	Ile	Leu	Arg	His	Gln	Val	Leu	Asn	Asp	Arg	Asp	Glu	Glu	Val	Glu
	530						535							540	
Leu	Cys	Ser	Ser	Val	Glu	Cys	Lys	Gly	Ile	Ile	Gly	Asn	Asp	Gly	Arg
545					550					555					560
His	Tyr	Ile	Leu	Asp	Leu	Leu	Arg	Thr	Phe	Pro	Pro	Asp	Leu	Asn	Phe
				565					570						575
Leu	Pro	Val	Pro	Gly	Glu	Glu	Leu	Pro	Glu	Glu	Cys	Ala	Arg	Ala	Gly
	580							585						590	
Phe	Pro	Arg	Ala	His	Arg	His	Lys	Leu	Cys	Cys	Leu	Arg	Gln	Glu	Leu
	595						600							605	
Val	Gly	Ala	Phe	Val	Glu	His	Arg	Tyr	Leu	Leu	Phe	Met	Lys	Leu	Ala
	610						615							620	
Ala	Leu	Gln	Leu	Met	Gln	Gln	Asn	Ala	Ser	Gln	Leu	Glu	Thr	Pro	Ser
625					630					635					640
Ser	Leu	Glu	Asn	Gly	Gly	Pro	Ser	Ser	Leu	Glu	Ser	Lys	Ser	Glu	Asp
			645						650						655
Pro	Pro	Gly	Gln	Glu	Ala	Gly	Ser	Glu	Glu	Glu	Gly	Ser	Ser	Ala	Ser
			660						665						670
Gly	Leu	Ala	Lys	Val	Lys	Glu	Leu	Ala	Glu	Thr	Ile	Ala	Ala	Asp	Asp
	675							680						685	
Gly	Thr	Asp	Pro	Arg	Ser	Arg	Glu	Val	Ile	Arg	Asn	Ala	Cys	Lys	Ala
	690						695							700	
Val	Gly	Ser	Ile	Ser	Ser	Thr	Ala	Phe	Asp	Ile	Arg	Phe	Asn	Pro	Asp
705					710					715					720
Ile	Phe	Ser	Pro	Gly	Val	Arg	Phe	Pro	Glu	Ser	Cys	Gln	Asp	Glu	Val
				725						730					735
Arg	Asp	Gln	Lys	Gln	Leu	Leu	Lys	Asp	Ala	Ala	Ala	Phe	Leu	Leu	Ser
			740						745						750
Cys	Gln	Ile	Pro	Gly	Leu	Val	Lys	Asp	Cys	Met	Glu	His	Ala	Val	Leu
	755							760							765
Pro	Val	Asp	Gly	Ala	Thr	Leu	Ala	Glu	Val	Met	Arg	Gln	Arg	Gly	Ile



770                      775                      780  
 Asn Met Arg Tyr Leu Gly Lys Val Leu Glu Leu Val Leu Arg Ser Pro  
 785                      790                      795                      800  
 Ala Arg His Gln Leu Asp His Val Phe Lys Ile Gly Ile Gly Glu Leu  
                     805                      810                      815  
 Ile Thr Arg Ser Ala Lys His Ile Phe Lys Thr Tyr Leu Gln Gly Val  
                     820                      825                      830  
 Glu Leu Ser Gly Leu Ser Ala Ala Ile Ser His Phe Leu Asn Cys Phe  
                     835                      840                      845  
 Leu Ser Ser Tyr Pro Asn Pro Val Ala His Leu Pro Ala Asp Glu Leu  
                     850                      855                      860  
 Val Ser Lys Glu Arg Asn Lys Arg Arg Lys Thr Gly Pro Arg Gly Leu  
 865                      870                      875                      880  
 Gln Ile Thr Gln Pro Gly Leu Ser  
                     885

<210> 3612

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3612

Met Arg Asp Thr Gly Ser Cys Leu Ser Leu Asn Ile Pro Pro Ala Gly  
   1                      5                      10                      15  
 Gly His Lys Gly Ala Asp Ala Ala Asp Val Ser Ser Gly Ala Met Gly  
                     20                      25                      30  
 His Arg His Pro Ala Gly Ser Glu Ala Ala Glu Ser Pro Gly Val Thr  
                     35                      40                      45  
 Phe Pro Ala Gly Thr Arg Asn Thr Gly Ser Cys Thr Phe Pro Leu Ser  
                     50                      55                      60  
 Arg Arg Arg Trp Val Ile Thr Gly Phe Thr Ser Phe Pro Leu Gln Met  
   65                      70                      75                      80  
 Pro Asp Gly Pro Gly Met Thr Ala Ala Ser Gly Lys Leu Tyr Gln Phe  
                     85                      90                      95  
 Arg His Pro Val Arg

100

&lt;210&gt; 3613

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3613

Met Val Leu Leu Leu Leu Ser Leu Asp Phe Trp Ser Val Lys Asn Val

1 5 10 15

Thr Gly Arg Leu Leu Val Gly Leu Arg Trp Trp Asn Gln Ile Asp Glu

20 25 30

Asp Gly Lys Ser His Trp Ile Phe Glu Ala Arg Lys Val Ser Pro Asn

35 40 45

Ser Ile Ala Ala Thr Glu Ala Glu Ala Arg Ile Phe Trp Leu Gly Leu

50 55 60

Ile Ile Cys Pro Met Ile Trp Ile Val Phe Phe Phe Ser Thr Leu Phe

65 70 75 80

Ser Leu Lys Leu Lys Trp Leu Ala Leu Val Val Ala Gly Ile Ser Leu

85 90 95

Gln Ala Ala Asn Leu Tyr Gly Tyr Ile Leu Cys Lys Met Gly Gly Asn

100 105 110

Ser Asp Ile Gly Lys Val Thr Ala Ser Phe Leu Ser Gln Thr Val Phe

115 120 125

Gln Thr Ala Cys Pro Gly Asp Phe Gln Lys Pro Gly Leu Glu Gly Leu

130 135 140

Glu Ile His Gln His

145

&lt;210&gt; 3614

&lt;211&gt; 626

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3614

Met Pro His Ile Gly Asp Trp Trp Glu Ala Val Ser Glu Thr Val Arg  
 1 5 10 15  
 Ala Thr Phe Leu Thr Leu Leu Gln Asp Ile Pro Ser Phe Ser Pro Ile  
 20 25 30  
 Phe Leu Leu Ser Thr Ser Glu Thr Met Tyr Ser Glu Leu Pro Glu Glu  
 35 40 45  
 Val Lys Cys Ile Phe Arg Ile Gln Tyr Glu Glu Val Leu Tyr Ile Gln  
 50 55 60  
 Arg Pro Ile Glu Glu Asp Arg Arg Lys Phe Phe Gln Glu Leu Ile Leu  
 65 70 75 80  
 Asn Gln Ala Ser Met Ala Pro Pro Arg Arg Lys His Ala Ala Leu Cys  
 85 90 95  
  
 Ala Met Glu Val Leu Pro Leu Ala Leu Pro Ser Pro Pro Arg Gln Leu  
 100 105 110  
 Ser Glu Ser Glu Lys Ser Arg Met Glu Asp Gln Glu Glu Asn Thr Leu  
 115 120 125  
 Arg Glu Leu Arg Leu Phe Leu Arg Asp Val Thr Lys Arg Leu Ala Thr  
 130 135 140  
 Asp Lys Arg Phe Asn Ile Phe Ser Lys Pro Val Asp Ile Glu Glu Val  
 145 150 155 160  
 Ser Asp Tyr Leu Glu Val Ile Lys Glu Pro Met Asp Leu Ser Thr Val  
 165 170 175  
 Ile Thr Lys Ile Asp Lys His Asn Tyr Leu Thr Ala Lys Asp Phe Leu  
 180 185 190  
 Lys Asp Ile Asp Leu Ile Cys Ser Asn Ala Leu Glu Tyr Asn Pro Asp  
 195 200 205  
 Lys Asp Pro Gly Asp Lys Ile Ile Arg His Arg Ala Cys Thr Leu Lys  
 210 215 220  
 Asp Thr Ala His Ala Ile Ile Ala Ala Glu Leu Asp Pro Glu Phe Asn  
 225 230 235 240  
 Lys Leu Cys Glu Glu Ile Lys Glu Ala Arg Ile Lys Arg Gly Leu Ser  
 245 250 255  
 Val Thr Ser Glu Gln Ile Asn Pro His Ser Thr Gly Ala Arg Lys Thr

260	265	270
Glu Thr Arg Val Glu Glu Ala Phe Arg His Lys Gln Arg Asn Pro Met		
275	280	285
Asp Val Trp His Asn Ser Ala Asn Lys Cys Ala Phe Arg Val Arg Arg		
290	295	300
Lys Ser Arg Arg Arg Ser Gln Trp Gly Lys Gly Ile Ile Lys Lys Arg		
305	310	315
Lys Val Asn Asn Leu Lys Lys Asp Glu Glu Asp Thr Lys Phe Ala Asp		
325	330	335
Tyr Glu Asn His Thr Glu Asp Arg Lys Leu Leu Glu Asn Gly Glu Phe		
340	345	350
Glu Val Ser Thr Asp Cys His Glu Glu Asn Gly Glu Glu Thr Gly Asp		
355	360	365
Leu Ser Met Thr Asn Asp Glu Ser Ser Cys Asp Ile Met Asp Leu Asp		
370	375	380
Gln Gly Gln Arg Leu Asn Asn Gly Ala Gly Thr Lys Glu Asn Phe Ala		
385	390	395
Ser Thr Glu Glu Glu Ser Ser Asn Glu Ser Leu Leu Val Asn Ser Ser		
405	410	415
Ser Ser Leu Asn Pro Glu Gln Thr Ser Arg Lys Glu Thr Phe Leu Lys		
420	425	430
Gly Asn Cys Leu Asn Gly Glu Ala Ser Thr Asp Ser Phe Glu Gly Ile		
435	440	445
Pro Val Leu Glu Cys Gln Asn Gly Lys Leu Glu Val Val Ser Phe Cys		
450	455	460
Asp Ser Gly Asp Lys Cys Ser Ser Glu Gln Lys Ile Leu Leu Glu Asp		
465	470	475
Gln Ser Lys Glu Lys Pro Glu Thr Ser Thr Glu Asn His Gly Asp Asp		
485	490	495
Leu Glu Lys Leu Glu Ala Leu Glu Cys Ser Asn Asn Glu Lys Leu Glu		
500	505	510
Pro Gly Ser Asp Val Glu Val Lys Asp Ala Glu Leu Asp Lys Glu Gly		
515	520	525
Ala Ser Lys Val Lys Lys Tyr Arg Lys Leu Ile Leu Glu Gln Ala Lys		
530	535	540
Thr Thr Ser Leu Glu Leu Val Pro Glu Glu Pro Ser Glu Pro Val Pro		

545                      550                      555                      560  
 Pro Leu Ile Val Asp Arg Glu Arg Leu Lys Lys Leu Leu Asp Leu Leu  
                          565                      570                      575  
 Val Asp Lys Ser Asn Asn Leu Ala Val Asp Gln Leu Glu Arg Leu Tyr  
                          580                      585                      590  
 Ser Leu Leu Ser Gln Cys Ile Tyr Arg His Arg Lys Asp Tyr Asp Lys  
                          595                      600                      605  
 Ser Gln Leu Val Glu Glu Met Glu Arg Thr Val His Met Phe Glu Thr  
                          610                      615                      620  
 Phe Leu  
 625

<210> 3615

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3615

Met Asp Met Phe Thr Cys Leu Cys Val Arg Thr Tyr Ser Arg Val Cys  
   1                      5                      10                      15  
 Asp Thr Ala Ile Phe Thr Arg Leu Cys Asp Thr Ala Ile Phe Thr Arg  
                          20                      25                      30  
 Leu Cys Asp Thr Asp Ile His Ala Phe Val Cys Arg Thr Tyr Ser His  
                          35                      40                      45  
 Ile Cys Val Tyr Gly His Ile His Ala Phe Val Ile Gln Thr Tyr Ser  
                          50                      55                      60  
 Arg Ile Cys Val Tyr Arg His Ser Arg Val Cys Val Ile Arg Ile Tyr  
                          65                      70                      75                      80  
 Ser Arg Ile Cys Asp Thr Asp Ile Phe Thr Arg Leu Cys Asp Thr Ala  
                          85                      90                      95  
 Ile Phe Thr Cys Leu Cys Asp Thr Asp Ile His Ala Phe Val Cys Arg  
                          100                      105                      110  
 Thr Tyr Ser Arg Val Cys Val Tyr Arg His Ile His Ser Leu Glu Arg  
                          115                      120                      125  
 Val Glu Ser

130

&lt;210&gt; 3616

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3616

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Met Thr Ala Ser Ser Val Glu Gln Leu Arg Lys Glu Gly Asn Glu Leu
  1                   5                   10                   15
Phe Lys Cys Gly Asp Tyr Gly Gly Ala Leu Ala Ala Tyr Thr Gln Ala
                   20                   25                   30
Leu Gly Leu Asp Ala Thr Pro Gln Asp Gln Ala Val Leu His Arg Asn
                   35                   40                   45
Arg Ala Ala Cys His Leu Lys Leu Glu Asp Tyr Asp Lys Ala Glu Thr
                   50                   55                   60
Glu Ala Ser Lys Ala Ile Glu Lys Asp Gly Gly Asp Val Lys Ala Leu
                   65                   70                   75                   80
Tyr Arg Arg Ser Gln Ala Leu Glu Lys Leu Gly Arg Leu Asp Gln Ala
                   85                   90                   95
Val Leu Asp Leu Gln Arg Cys Val Ser Leu Glu Pro Lys Asn Lys Val
                   100                  105                  110
Phe Gln Glu Ala Leu Arg Asn Ile Gly Gly Gln Ile Gln Glu Lys Val
                   115                  120                  125
Arg Tyr Met Ser Ser Thr Asp Ala Lys Val Glu Gln Met Phe Gln Ile
                   130                  135                  140
Leu Leu Asp Pro Glu Glu Lys Gly Thr Glu Lys Lys Gln Lys Ala Ser
                   145                  150                  155                  160
Gln Asn Leu Val Val Leu Ala Arg Glu Asp Ala Gly Ala Glu Lys Ile
                   165                  170                  175
Phe Arg Ser Asn Gly Val Gln Leu Leu Gln Arg Leu Leu Asp Met Gly
                   180                  185                  190
Glu Thr Asp Leu Met Leu Ala Ala Leu Arg Thr Leu Val Gly Ile Cys
                   195                  200                  205
Ser Glu His Gln Ser Arg Thr Val Ala Thr Leu Ser Ile Leu Gly Thr

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210	215	220	
Arg Arg Val Val Ser Ile Leu Gly Val Glu Ser Gln Ala Val Ser Leu			
225	230	235	240
Ala Ala Cys His Leu Leu Gln Val Met Phe Asp Ala Leu Lys Glu Gly			
245	250	255	
Val Lys Lys Gly Phe Arg Gly Lys Glu Gly Ala Ile Ile Val Asp Pro			
260	265	270	
Ala Arg Glu Leu Lys Val Leu Ile Ser Asn Leu Leu Asp Leu Leu Thr			
275	280	285	
Glu Val Gly Val Ser Gly Gln Gly Arg Asp Asn Ala Leu Thr Leu Leu			
290	295	300	
Ile Lys Ala Val Pro Arg Lys Ser Leu Lys Asp Pro Asn Asn Ser Leu			
305	310	315	320
Thr Leu Trp Val Ile Asp Gln Gly Leu Lys Lys Ile Leu Glu Val Gly			
325	330	335	
Gly Ser Leu Gln Asp Pro Pro Gly Glu Leu Ala Val Thr Ala Asn Ser			
340	345	350	
Arg Met Ser Ala Ser Ile Leu Leu Ser Lys Leu Phe Asp Asp Leu Lys			
355	360	365	
Cys Asp Ala Glu Arg Glu Asn Phe His Arg Leu Cys Glu Asn Tyr Ile			
370	375	380	
Lys Ser Trp Phe Glu Gly Gln Gly Leu Ala Gly Lys Leu Arg Ala Ile			
385	390	395	400
Gln Thr Val Ser Cys Leu Leu Gln Gly Pro Cys Asp Ala Gly Asn Arg			
405	410	415	
Ala Leu Glu Leu Ser Gly Val Met Glu Ser Val Ile Ala Leu Cys Ala			
420	425	430	
Ser Glu Gln Glu Glu Glu Gln Leu Val Ala Val Glu Ala Leu Ile His			
435	440	445	
Ala Ala Gly Lys Ala Lys Arg Ala Ser Phe Ile Thr Ala Asn Gly Val			
450	455	460	
Ser Leu Leu Lys Asp Leu Tyr Lys Cys Ser Glu Lys Asp Ser Ile Arg			
465	470	475	480
Ile Arg Ala Leu Val Gly Leu Cys Lys Leu Gly Ser Ala Gly Gly Thr			
485	490	495	
Asp Phe Ser Met Lys Gln Phe Ala Glu Gly Ser Thr Leu Lys Leu Ala			

500	505	510
Lys Gln Cys Arg Lys Trp Leu Cys Asn Asp Gln Ile Asp Ala Gly Thr		
515	520	525
Arg Arg Trp Ala Val Glu Gly Leu Ala Tyr Leu Thr Phe Asp Ala Asp		
530	535	540
Val Lys Glu Glu Phe Val Glu Asp Ala Ala Ala Leu Lys Ala Leu Phe		
545	550	555
Gln Leu Ser Arg Leu Glu Glu Arg Ser Val Leu Phe Ala Val Ala Ser		
565	570	575
Ala Leu Val Asn Cys Thr Asn Ser Tyr Asp Tyr Glu Glu Pro Asp Pro		
580	585	590
Lys Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln		
595	600	605
His Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu		
610	615	620
Leu Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu		
625	630	635
Ser Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe		
645	650	655
Leu Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln		
660	665	670
Gly Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val		
675	680	685
Gly Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser		
690	695	700
Asn Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Val Arg		
705	710	715
Pro Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe		
725	730	735
Glu Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu		
740	745	750
Arg Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr		
755	760	765
Met Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met		
770	775	780
Cys Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln		



785                      790                      795                      800  
 Gly Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp  
                             805                      810                      815  
 Glu Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser  
                             820                      825                      830  
 Met Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp  
                             835                      840                      845  
 Leu Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln  
                             850                      855                      860  
 His Arg Gly Ala Val Val Val Leu Asn Met Val Glu Ala Ser Arg Glu  
 865                      870                      875                      880  
 Ile Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val  
                             885                      890                      895  
 Leu Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Ala Cys  
                             900                      905                      910  
 Leu Asp Lys Ala Val Glu Tyr Gly Leu Ile Gln Pro Asn Gln Asp Gly  
                             915                      920                      925  
 Glu

<210> 3617

<211> 527

<212> PRT

<213> Homo sapiens

<400> 3617

Met Glu Cys Leu Cys Ala His Pro Pro Ala Gly Leu Gln His Leu Gly  
   1                      5                      10                      15  
 Leu Gly His Asn Lys Leu Leu Gly Pro Leu Glu Ser Leu Tyr Val Thr  
                             20                      25                      30  
 Ala Asn His Trp Gly Arg Val Arg Leu Gly Leu Gly Asp Ala Val Leu  
                             35                      40                      45  
 Thr Ala Ala Ala Cys Val Phe Leu Leu Phe Ser Glu Leu Arg Ser Ile  
                             50                      55                      60  
 Cys Phe Leu Val Cys Gly Ser Arg Leu Leu Ala Pro Cys Ser Pro Gly

65	70	75	80
Phe Leu Thr Pro Arg Arg Ser Cys Ser Pro Ser Arg Pro Asn Leu Val			
	85	90	95
Ser Leu Asp Leu Gly Phe Asn Asp Leu Thr Asp Leu Gln Ser Met Val			
	100	105	110
Thr Ser Leu Arg Thr Leu Arg His Leu Arg Leu Leu Val Leu Lys Gly			
	115	120	125
Asn Pro Leu Ala Leu Val Pro Tyr Tyr Arg Gly Leu Thr Ile Asp Ser			
	130	135	140
Leu Ala Gln Leu Cys Val Leu Asp Asp Ile Thr Val Ser Pro Asn Glu			
145	150	155	160
Lys His Leu Phe Arg Gly Leu Ser Leu Asn Gly Asp Leu Leu Ala Gln			
	165	170	175
Glu Ala Gln Phe Val Val Thr Ile Gly Asn Ile Arg Gly Val Leu Asp			
	180	185	190
Thr Ser Val Leu Asp Pro Glu Pro Arg Pro Glu Gly Pro Phe Ile Thr			
	195	200	205
Tyr Asn Tyr Tyr Val Thr Tyr Asp Phe Val Lys Asp Glu Glu Gly Glu			
	210	215	220
Met Asn Glu Ser Ala Gly Val Leu Ala Glu Ile Val Lys Pro Ser Pro			
225	230	235	240
Ser Leu Glu Leu Leu Val Glu Glu Ser Pro Glu Glu Val Val Glu Asp			
	245	250	255
Val Ile Glu Asp Ile Val Glu Glu Val Thr Glu Glu Val Glu Gly Ser			
	260	265	270
Leu Glu Ser Glu Val Glu Glu Ser Gly Glu Ser Glu Leu Ser Val Ile			
	275	280	285
Ser Gly Pro Ser Thr Ile Leu Gln Met Pro Arg Ala Ser Ala Glu Glu			
	290	295	300
Leu Ala Lys Leu Arg Leu Arg Ile Asp Pro Arg Leu Cys Pro Ser Pro			
305	310	315	320
Gly Thr Val Leu Phe Ser Thr Ala His Lys Pro Trp Ala Glu Val Ile			
	325	330	335
Pro Cys Ser Tyr Glu Met Gln His Ser Leu Arg Asp Leu Val Pro Leu			
	340	345	350
Lys Ala Phe Leu Leu Ala Gly Thr Thr Val Thr Ile Val Glu Glu Lys			

&lt;211&gt; 115

&lt;212&gt; PRT

⟨213⟩ Homo sapiens

<400> 3618

Met	Arg	Lys	Ala	Tyr	Ser	Pro	Leu	Gln	Val	Leu	Arg	Gly	Cys	Leu	Leu
1				5				10						15	
Leu	Pro	Ser	Leu	Leu	His	Ala	Leu	Ser	Leu	Gln	Glu	Gln	Pro	Met	Val
			20					25					30		
Trp	Pro	Leu	Thr	Arg	Gly	Pro	Ser	Ser	Ala	Ser	Asp	Ala	Leu	Ser	Ser
			35				40					45			
Gly	Gly	Pro	Tyr	His	Pro	Ser	Glu	Cys	Cys	Phe	Thr	Tyr	Thr	Thr	Tyr

50                      55                      60  
 Lys Ile Pro Arg Gln Arg Ile Met Asp Tyr Tyr Glu Thr Asn Ser Gln  
 65                      70                      75                      80  
 Cys Ser Lys Pro Gly Ile Val Phe Ile Thr Lys Arg Gly His Ser Val  
                     85                      90                      95  
 Cys Thr Asn Pro Ser Asp Lys Trp Val Gln Asp Tyr Ile Lys Asp Met  
                     100                      105                      110  
 Lys Glu Asn  
                     115

<210> 3619

<211> 528

<212> PRT

<213> Homo sapiens

<400> 3619

Met Ala Ala Tyr Gln Gln Glu Glu Gln Met Gln Leu Pro Arg Ala Asp  
 1                      5                      10                      15  
 Ala Ile Arg Ser Arg Leu Ile Asp Thr Phe Ser Leu Ile Glu His Leu  
                     20                      25                      30  
 Gln Gly Leu Ser Gln Ala Val Pro Arg His Thr Ile Arg Glu Leu Leu  
                     35                      40                      45  
 Asp Pro Ser Arg Gln Lys Lys Leu Ile Leu Gly Asp Gln His Gln Leu  
                     50                      55                      60  
 Val Arg Phe Ser Ile Lys Pro Gln Arg Ile Glu Gln Ile Ser His Ala  
 65                      70                      75                      80  
 Gln Arg Leu Leu Ser Arg Leu His Val Arg Cys Ser Gln Arg Pro Pro  
                     85                      90                      95  
 Leu Ser Leu Trp Ala Gly Trp Val Leu Glu Cys Pro Leu Phe Lys Asn  
                     100                      105                      110  
 Phe Ile Ile Phe Leu Val Phe Leu Asn Thr Ile Ile Leu Met Val Glu  
                     115                      120                      125  
 Ile Glu Leu Leu Glu Ser Thr Asn Thr Lys Leu Trp Pro Leu Lys Leu  
                     130                      135                      140

Thr Leu Glu Val Ala Ala Trp Phe Ile Leu Leu Ile Phe Ile Leu Glu  
 145 150 155 160  
 Ile Leu Leu Lys Trp Leu Ser Asn Phe Ser Val Phe Trp Lys Ser Ala  
 165 170 175  
 Trp Asn Val Phe Asp Phe Val Val Thr Met Leu Ser Leu Leu Pro Glu  
 180 185 190  
 Val Val Val Leu Val Gly Val Thr Gly Gln Ser Val Trp Leu Gln Leu  
 195 200 205  
 Leu Arg Ile Cys Arg Val Leu Arg Ser Leu Lys Leu Leu Ala Gln Phe  
 210 215 220  
 Arg Gln Ile Gln Ile Ile Ile Leu Val Leu Val Arg Ala Leu Lys Ser  
 225 230 235 240  
 Met Thr Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala  
 245 250 255  
 Val Thr Gly Val Tyr Val Phe Ser Glu Tyr Thr Arg Ser Pro Arg Gln  
 260 265 270  
 Asp Leu Glu Tyr His Val Ser Phe Ser Asp Leu Pro Asn Ser Leu Val  
 275 280 285  
 Thr Val Phe Ile Leu Phe Thr Leu Asp His Trp Tyr Ala Leu Leu Gln  
 290 295 300  
 Asp Val Trp Lys Val Pro Glu Val Ser Arg Ile Phe Ser Ser Ile Tyr  
 305 310 315 320  
 Phe Ile Leu Trp Leu Leu Leu Gly Ser Ile Ile Phe Arg Ser Ile Ile  
 325 330 335  
 Val Ala Met Met Val Thr Asn Phe Gln Asn Ile Arg Lys Glu Leu Asn  
 340 345 350  
 Glu Glu Met Ala Arg Arg Glu Val Gln Leu Lys Ala Asp Met Phe Lys  
 355 360 365  
 Arg Gln Ile Ile Gln Arg Arg Lys Asn Met Ser His Glu Ala Leu Thr  
 370 375 380  
 Ser Ser His Ser Lys Ile Glu Asp Arg Gly Ala Ser Gln Gln Arg Glu  
 385 390 395 400  
 Ser Leu Asp Leu Ser Glu Val Ser Glu Val Glu Ser Asn Tyr Gly Ala  
 405 410 415  
 Thr Glu Glu Asp Leu Ile Thr Ser Ala Ser Lys Thr Glu Glu Thr Leu  
 420 425 430

Ser Lys Lys Arg Glu Tyr Gln Ser Ser Pro Cys Val Ser Ser Thr Ser  
 435 440 445  
 Ser Ser Tyr Ser Ser Ser Ser Glu Ser Arg Phe Ser Glu Ser Ile Gly  
 450 455 460  
 Arg Leu Asp Trp Glu Thr Leu Val His Glu Asn Leu Pro Gly Leu Met  
 465 470 475 480  
 Glu Met Asp Gln Asp Asp Arg Val Trp Pro Arg Asp Ser Leu Phe Arg  
 485 490 495  
 Tyr Phe Glu Leu Leu Glu Lys Leu Gln Tyr Asn Leu Glu Glu Arg Lys  
 500 505 510  
 Lys Leu Gln Glu Phe Ala Val Gln Ala Leu Met Asn Leu Glu Asp Lys  
 515 520 525

<210> 3620

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3620

Met Phe Arg Leu Trp Leu Leu Leu Ala Gly Leu Cys Gly Leu Leu Ala  
 1 5 10 15  
 Ser Arg Pro Gly Phe Gln Asn Ser Leu Leu Gln Ile Val Ile Pro Glu  
 20 25 30  
 Lys Ile Gln Thr Asn Thr Asn Asp Ser Ser Glu Ile Glu Tyr Glu Gln  
 35 40 45  
 Ile Ser Tyr Ile Ile Pro Ile Asp Glu Lys Leu Tyr Thr Val His Leu  
 50 55 60  
 Lys Gln Arg Tyr Phe Leu Ala Asp Asn Phe Met Ile Tyr Leu Tyr Asn  
 65 70 75 80  
 Gln Gly Ser Met Asn Thr Tyr Ser Ser Asp Ile Gln Thr Gln Cys Tyr  
 85 90 95  
 Tyr Gln Gly Asn Ile Glu Gly Tyr Pro Asp Ser Met Val Thr Leu Ser  
 100 105 110  
 Thr Cys Ser Gly Leu Arg Gly Ile Leu Gln Phe Glu Asn Val Ser Tyr

115                      120                      125  
 Gly Ile Glu Pro Leu Glu Ser Ala Val Glu Phe Gln His Val Leu Tyr  
 130                      135                      140  
 Lys Leu Lys Asn Glu Asp Asn Asp Ile Ala Ile Phe Ile Asp Arg Ser  
 145                      150                      155                      160  
 Leu Lys Glu Gln Pro Met Asp Asp Asn Ile Phe Ile Ser Glu Lys Ser  
 165                      170                      175  
 Glu Pro Ala Val Pro Asp Leu Phe Pro Leu Tyr Leu Glu Met His Ile  
 180                      185                      190  
 Val Val Asp Lys Thr Leu Tyr Asp Tyr Trp Gly Ser Asp Ser Met Ile  
 195                      200                      205  
 Val Thr Asn Lys Val Ile Glu Ile Val Gly Leu Ala Asn Ser Met Phe  
 210                      215                      220  
 Thr Gln Phe Lys Val Thr Ile Val Leu Ser Ser Leu Glu Leu Trp Ser  
 225                      230                      235                      240  
 Asp Glu Asn Lys Ile Ser Thr Val Gly Glu Ala Asp Trp Arg Glu Met  
 245                      250                      255  
 Lys Ser Val Ile Val Val Leu Arg Leu Asn Val Asp Leu Gln Ala Val  
 260                      265                      270  
 Val Ile Phe Glu Leu Val Tyr  
 275

<210> 3621

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3621

Met Ile Ser Val Val Leu Cys Trp Glu Glu Glu Thr Ala Gly Asn His  
 1                      5                      10                      15  
 Arg Lys Leu Val Gln Gly Ala Pro Met Lys Lys Ser Gln Ala Arg Leu  
 20                      25                      30  
 Leu Arg Arg Arg Gly Pro Gly Asn Pro Thr Pro Gly Phe Pro Leu Gly  
 35                      40                      45  
 Val Gly Gln Ser Gln Leu Gln Asp Pro Ala Thr Ala Ala Arg Phe Pro

50	55	60
Glu Cys Trp Arg Ser Pro Leu Arg Gly Arg Gly Arg Ala Leu Ser Ser		
65	70	75
Arg Thr Arg Ala Pro Pro Pro Arg Pro Gly Pro Leu Thr Val Glu Ala		
85	90	95
Phe His Leu Trp Leu Leu Ala Leu Gly Leu Leu Leu Gln Pro Leu Gly		
100	105	110
Phe Ala Ala Leu Leu Ala Val Glu His Glu Ala Gln His Gly Asn Asp		
115	120	125
Val Gly His Ser Gly Thr His Arg Gln Pro Asn Gly Leu Asp His Leu		
130	135	140
Val Gly Gly Arg Ala Ala Arg Ala Leu Arg Leu Leu Arg His Arg Leu		
145	150	155
Val		160

&lt;210&gt; 3622

&lt;211&gt; 514

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3622

Met Gly Asp Trp Asn Leu Leu Gly Asp Thr Leu Glu Glu Val His Ile		
1	5	10
His Ser Thr Met Ile Gly Lys Ile Trp Leu Thr Ile Leu Phe Ile Phe		
20	25	30
Arg Met Leu Val Leu Gly Val Ala Ala Glu Asp Val Trp Asn Asp Glu		
35	40	45
Gln Ser Gly Phe Ile Cys Asn Thr Glu Gln Pro Gly Cys Arg Asn Val		
50	55	60
Cys Tyr Asp Gln Ala Phe Pro Ile Ser Leu Ile Arg Tyr Trp Val Leu		
65	70	75
Gln Val Ile Phe Val Ser Ser Pro Ser Leu Val Tyr Met Gly His Ala		
85	90	95
Leu Tyr Arg Leu Arg Val Leu Glu Glu Glu Arg Gln Arg Met Lys Ala		



100	105	110	
Gln Leu Arg Val Glu Leu Glu Glu Val Glu Phe Glu Met Pro Arg Asp			
115	120	125	
Arg Arg Arg Leu Glu Gln Glu Leu Cys Gln Leu Glu Lys Arg Lys Leu			
130	135	140	
Asn Lys Ala Pro Leu Arg Gly Thr Leu Leu Cys Thr Tyr Val Ile His			
145	150	155	160
Ile Phe Thr Arg Ser Val Val Glu Val Gly Phe Met Ile Gly Gln Tyr			
165	170	175	
Leu Leu Tyr Gly Phe His Leu Glu Pro Leu Phe Lys Cys His Gly His			
180	185	190	
Pro Cys Pro Asn Ile Ile Asp Cys Phe Val Ser Arg Pro Thr Glu Lys			
195	200	205	
Thr Ile Phe Leu Leu Phe Met Gln Ser Ile Ala Thr Ile Ser Leu Phe			
210	215	220	
Leu Asn Ile Leu Glu Ile Phe His Leu Gly Phe Lys Lys Ile Lys Arg			
225	230	235	240
Gly Leu Trp Gly Lys Tyr Lys Leu Lys Lys Glu His Asn Glu Phe His			
245	250	255	
Ala Asn Lys Ala Lys Gln Asn Val Ala Lys Tyr Gln Ser Thr Ser Ala			
260	265	270	
Asn Ser Leu Lys Arg Leu Pro Ser Ala Pro Asp Tyr Asn Leu Leu Val			
275	280	285	
Glu Lys Gln Thr His Thr Ala Val Tyr Pro Ser Leu Asn Ser Ser Ser			
290	295	300	
Val Phe Gln Pro Asn Pro Asp Asn His Ser Val Asn Asp Glu Lys Cys			
305	310	315	320
Ile Leu Asp Glu Gln Glu Thr Val Leu Ser Asn Glu Ile Ser Thr Leu			
325	330	335	
Ser Thr Ser Cys Ser His Phe Gln His Ile Ser Ser Asn Asn Asn Lys			
340	345	350	
Asp Thr His Lys Ile Phe Gly Lys Glu Leu Asn Gly Asn Gln Leu Met			
355	360	365	
Glu Lys Arg Glu Thr Glu Gly Lys Asp Ser Lys Arg Asn Tyr Tyr Ser			
370	375	380	
Arg Gly His Arg Ser Ile Pro Gly Val Ala Ile Asp Gly Glu Asn Asn			

385                      390                      395                      400  
 Met Arg Gln Ser Pro Gln Thr Val Phe Ser Leu Pro Ala Asn Cys Asp  
                             405                      410                      415  
 Trp Lys Pro Arg Trp Leu Arg Ala Thr Trp Gly Ser Ser Thr Glu His  
                             420                      425                      430  
 Glu Asn Arg Gly Ser Pro Pro Lys Val Pro Gly Ser Lys Ala Thr Ala  
                             435                      440                      445  
 Ser Ser Leu Leu Leu Ile Leu Gln Arg Pro Thr Ser Ser Gln Pro Arg  
                             450                      455                      460  
 Leu Lys Glu Thr Pro Lys Ile Lys Ala Glu Ala Lys Ile Tyr Asp Ser  
 465                      470                      475                      480  
 Lys His Pro Pro Gln Leu Leu Gln Ser Thr Val Ser Thr Phe Ser Gly  
                             485                      490                      495  
 Arg Glu Pro Arg Ser Pro Ala Pro Met Gly His His Ser Phe Arg Gly  
                             500                      505                      510  
 Pro Arg

<210> 3623

<211> 345

<212> PRT

<213> Homo sapiens

<400> 3623

Met Ser Glu Asn Glu Leu Asp Thr Thr Leu His Leu Lys Cys Lys Leu  
   1                      5                      10                      15  
 Gly Met Lys Ser Ile Leu Pro Ile Phe Arg Cys Leu Asn Ser Leu Glu  
                             20                      25                      30  
 Arg Asn Ile Glu Lys Cys Arg Ile Phe Thr Arg Ser Asp Lys Cys Lys  
                             35                      40                      45  
 Val Val Ile Gln Phe Phe Tyr Arg His Gly Ile Lys Arg Thr His Asn  
                             50                      55                      60  
 Ile Cys Phe Gln Glu Ser Gln Pro Leu Gln Val Ile Phe Asp Lys Asn  
   65                      70                      75                      80  
 Val Cys Thr Asn Thr Leu Met Ile Gln Pro Arg Leu Leu Ala Asp Ala

	85		90		95
Ile Val Leu Phe Thr Ser Ser Gln Glu Glu Val Thr Leu Ala Val Thr					
	100		105		110
Pro Leu Asn Phe Cys Leu Lys Ser Ser Asn Glu Glu Ser Met Asp Leu					
	115		120		125
Ser Asn Ala Val His Ser Glu Met Phe Val Gly Ser Asp Glu Phe Asp					
	130		135		140
Phe Phe Gln Ile Gly Met Asp Thr Glu Ile Thr Phe Cys Phe Lys Glu					
145		150		155	160
Leu Lys Gly Ile Leu Thr Phe Ser Glu Ala Thr His Ala Pro Ile Ser					
	165		170		175
Ile Tyr Phe Asp Phe Pro Gly Lys Pro Leu Ala Leu Ser Ile Asp Asp					
	180		185		190
Met Leu Val Glu Ala Asn Phe Ile Leu Ala Thr Leu Ala Asp Glu Gln					
	195		200		205
Ser Arg Ala Ser Ser Pro Gln Ser Leu Cys Leu Ser Gln Lys Arg Lys					
	210		215		220
Arg Ser Asp Leu Ile Glu Lys Lys Ala Gly Lys Asn Val Thr Gly Gln					
225		230		235	240
Ala Leu Glu Cys Ile Ser Lys Lys Ala Ala Pro Arg Arg Leu Tyr Pro					
	245		250		255
Lys Glu Thr Leu Thr Asn Ile Ser Ala Leu Glu Asn Cys Gly Ser Pro					
	260		265		270
Ala Met Lys Arg Val Asp Gly Asp Val Ser Glu Val Ser Glu Ser Ser					
	275		280		285
Val Ser Asn Thr Glu Glu Val Pro Gly Ser Leu Cys Leu Arg Lys Phe					
	290		295		300
Ser Cys Met Phe Phe Gly Ala Val Ser Ser Asp Gln Gln Glu His Phe					
305		310		315	320
Asn His Pro Phe Asp Ser Leu Ala Arg Ala Ser Asp Ser Glu Glu Asp					
	325		330		335
Met Asn Asn Gly Ser Phe Ser Ile Phe					
	340		345		

&lt;211&gt; 718

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3624

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Met Val Gly Lys Ser Gln Gln Thr Asp Val Ile Glu Lys Lys Lys His
  1             5             10             15
Met Ala Ile Pro Lys Ser Ser Ser Pro Lys Ala Thr His Arg Ile Gly
             20             25             30
Asn Thr Ser Gly Ser Lys Gly Ser Tyr Ser Ala Lys Ala Tyr Glu Ser
             35             40             45
Ile Arg Val Ser Ser Glu Leu Gln Gln Thr Trp Thr Lys Arg Lys His
             50             55             60
Gly Gln Glu Met Thr Ser Lys Ser Leu Gln Thr Asp Thr Ile Val Glu
             65             70             75             80
Glu Lys Lys Glu Val Lys Leu Val Glu Glu Thr Val Val Pro Glu Glu
             85             90             95
Lys Ser Ala Asp Val Arg Glu Ala Ala Ile Glu Leu Pro Glu Ser Val
             100            105            110
Gln Asp Val Glu Ile Pro Pro Asn Ile Pro Ser Val Gln Leu Lys Met
             115            120            125
Asp Arg Ser Gln Gln Thr Ser Arg Thr Gly Tyr Trp Thr Met Met Asn
             130            135            140
Ile Pro Pro Val Glu Lys Val Asp Lys Glu Gln Gln Thr Tyr Phe Ser
             145            150            155            160
Glu Ser Glu Ile Val Val Ile Ser Arg Pro Asp Ser Ser Ser Thr Lys
             165            170            175
Ser Lys Glu Asp Ala Leu Lys His Lys Ser Ser Gly Lys Ile Phe Ala
             180            185            190
Ser Glu His Pro Glu Phe Gln Pro Ala Thr Asn Ser Asn Glu Glu Ile
             195            200            205
Gly Gln Lys Asn Ile Ser Arg Thr Ser Phe Thr Gln Glu Thr Lys Lys
             210            215            220
Gly Pro Pro Val Leu Leu Glu Asp Glu Leu Arg Glu Glu Val Thr Val
             225            230            235            240
Pro Val Val Gln Glu Gly Ser Ala Val Lys Lys Val Ala Ser Ala Glu

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	245	250	255
Ile Glu Pro Pro Ser Thr Glu Lys Phe Pro Ala Lys Ile Gln Pro Pro			
	260	265	270
Leu Val Glu Glu Ala Thr Ala Lys Ala Glu Pro Arg Pro Ala Glu Glu			
	275	280	285
Thr His Val Gln Val Gln Pro Ser Thr Glu Glu Thr Pro Asp Ala Glu			
	290	295	300
Ala Ala Thr Ala Val Ala Glu Asn Ser Val Lys Val Gln Pro Pro Pro			
305	310	315	320
Ala Glu Glu Ala Pro Leu Val Glu Phe Pro Ala Glu Ile Gln Pro Pro			
	325	330	335
Ser Ala Glu Glu Ser Pro Ser Val Glu Leu Leu Ala Glu Ile Leu Pro			
	340	345	350
Pro Ser Ala Glu Glu Ser Pro Ser Glu Glu Pro Pro Ala Glu Ile Leu			
	355	360	365
Pro Pro Pro Ala Glu Lys Ser Pro Ser Val Glu Leu Leu Gly Glu Ile			
	370	375	380
Arg Ser Pro Ser Ala Gln Lys Ala Pro Ile Glu Val Gln Pro Leu Pro			
385	390	395	400
Ala Glu Gly Ala Leu Glu Glu Ala Pro Ala Lys Val Glu Pro Pro Thr			
	405	410	415
Val Glu Glu Thr Leu Ala Glu Val Gln Pro Leu Leu Pro Glu Glu Ala			
	420	425	430
Pro Arg Glu Glu Ala Arg Glu Leu Gln Leu Ser Thr Ala Met Glu Thr			
	435	440	445
Pro Ala Glu Glu Ala Pro Thr Glu Phe Gln Ser Pro Leu Pro Lys Glu			
	450	455	460
Thr Thr Ala Glu Glu Ala Ser Ala Glu Ile Gln Leu Leu Ala Ala Thr			
465	470	475	480
Glu Ala Ser Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala			
	485	490	495
Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro			
	500	505	510
Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln			
	515	520	525
Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala			

530	535	540	
Glu Glu Ala Pro Ala Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro			
545	550	555	560
Ser Glu Val Gln Pro Pro Pro Ala Glu Glu Ala Pro Ala Glu Val Gln			
	565	570	575
Ser Leu Pro Ala Glu Glu Thr Pro Ile Glu Glu Thr Leu Ala Ala Val			
	580	585	590
His Ser Pro Pro Ala Asp Asp Val Pro Ala Glu Glu Ala Ser Val Asp			
	595	600	605
Lys His Ser Pro Pro Ala Asp Leu Leu Leu Thr Glu Glu Phe Pro Ile			
	610	615	620
Gly Glu Ala Ser Ala Glu Val Ser Pro Pro Pro Ser Glu Gln Thr Pro			
625	630	635	640
Glu Asp Glu Ala Leu Val Glu Asn Val Ser Thr Glu Phe Gln Ser Pro			
	645	650	655
Gln Val Ala Gly Ile Pro Ala Val Lys Leu Gly Ser Val Val Leu Glu			
	660	665	670
Gly Glu Ala Lys Phe Glu Glu Val Ser Lys Ile Asn Ser Val Leu Lys			
	675	680	685
Asp Leu Ser Asn Thr Asn Asp Gly Gln Ala Pro Thr Leu Glu Ile Glu			
	690	695	700
Ser Val Phe His Ile Glu Leu Lys Gln Arg Pro Pro Glu Leu			
705	710	715	

&lt;210&gt; 3625

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3625

Met Gly Val Val Pro Val Ser Tyr Phe Ile Arg Asn Met Glu Glu Ser			
1	5	10	15
Tyr Val Asn Leu Asn His His Gly Leu Gly Pro Arg Gly Thr Lys Ala			
	20	25	30

Ile	Ala	Ile	Ala	Leu	Val	Ser	Asn	Met	Ala	Val	Thr	Lys	Leu	Glu	Leu
35					40					45					
Glu	Asp	Asn	Cys	Ile	Met	Glu	Glu	Gly	Val	Leu	Ser	Leu	Val	Glu	Met
50					55					60					
Leu	Gln	Glu	Asn	Tyr	Tyr	Leu	Gln	Glu	Met	Asn	Ile	Ser	Asn	Asn	His
65					70					75					
Leu	Gly	Leu	Glu	Gly	Ala	Arg	Ile	Ile	Ser	Asp	Phe	Phe	Glu	Arg	Asn
85					90					95					
Ser	Ser	Ser	Ile	Trp	Ser	Leu	Glu	Leu	Ser	Gly	Asn	Asp	Phe	Lys	Glu
100					105					110					
Asp	Ser	Ala	Ala	Leu	Leu	Cys	Gln	Ala	Leu	Ser	Thr	Asn	Tyr	Gln	Ile
115					120					125					
Lys	Lys	Leu	Asp	Leu	Ser	His	Asn	Gln	Phe	Ser	Asp	Val	Gly	Gly	Glu
130					135					140					
His	Leu	Gly	Gln	Met	Leu	Ala	Ile	Asn	Val	Gly	Leu	Thr	Ser	Leu	Asp
145					150					155					
Leu	Ser	Trp	Asn	Asn	Phe	His	Thr	Arg	Gly	Ala	Val	Ala	Leu	Cys	Asn
165					170					175					
Gly	Leu	Arg	Gly	Lys	Ser	Ser	Asp	Ser	Thr	Ala	Ala	Trp	Ser	Thr	Trp
180					185					190					
Ile	Ser	Val	Ala	Met	Thr	Ser	Ala	Met	Lys	Gly	Pro	Pro	Lys	Ser	Ala
195					200					205					
Lys	Asp	Trp	Asn	Pro	Met	Lys	Ala	Ser	Glu	Phe					
210					215										

&lt;210&gt; 3626

&lt;211&gt; 563

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3626

Met Ile Lys Arg Lys Ile Trp Cys Asn Leu Cys Ile Asp Leu Val Ala  
1 5 10 15  
Phe Thr Ser Glu Ile Phe Lys Gly Ala Val Phe Gln Ser Leu Asp Gly  
20 25 30

Ile Val Val Ser Ala Asn Cys Lys Leu Arg Lys Ile Phe Thr Leu Lys  
 35 40 45  
 Ser Lys Pro Gln Asp Thr Ala Asp Lys Asp Ala Val Tyr Gly Val Pro  
 50 55 60  
 Phe Ser Thr Asp Glu Pro Thr Asp Ile Ile Pro Arg Ser Cys Gln Leu  
 65 70 75 80  
 Met Thr Asp Val Pro His Val Thr Gln Leu Leu Asn Met Thr Lys Leu  
 85 90 95  
 Arg Gln Thr Glu Ile Lys Phe Gly Gly His Pro Leu Arg Ser Ala Glu  
 100 105 110  
 Ser Asp Gln Phe Ile Asn Arg Gly Thr Ser Ile Thr Arg Asn Ser Lys  
 115 120 125  
 Asn Gln Asp Val Cys His Ile Ala Phe Gly Ser Lys Val Leu Gly Pro  
 130 135 140  
 Pro Pro Leu Ser Gly Arg Arg Asn Asn Met Lys Ile Ser Ser Glu Thr  
 145 150 155 160  
 Val Arg Ser Val Gly Ser Lys Asn Asn Arg Ser Cys Gln Pro Ser Thr  
 165 170 175  
 Val Glu Lys Cys Val Asn Gly Thr Glu Met Ser Ala Leu Leu Ile Pro  
 180 185 190  
 Glu Ser Glu Glu Gln Gly Asn Lys Glu Asn Ile His Gln Ile Lys Gln  
 195 200 205  
 Thr Val Pro Ile His Ala Ala Asn Leu His Ile Met His Pro His Pro  
 210 215 220  
 Pro Gln Glu Pro Ser Ala Asp Lys Asn Asn Asn Arg Arg Arg Leu Arg  
 225 230 235 240  
 Leu Lys Ser Thr Ser Arg Glu Arg Thr Glu Thr Pro Ser Gly Ser Ser  
 245 250 255  
 Ser Gly Asn Asn Arg Ile Glu Asp Lys Ala Ser Thr Ile Leu Thr Thr  
 260 265 270  
 Val Ser Gln Gln Gly Ala Glu Leu Leu Asn Ser Gly Thr Leu Gly Pro  
 275 280 285  
 Gln Ser Pro Asp Gln Ser Asp Glu Trp Ile Phe Pro Glu Asn Ala Asp  
 290 295 300  
 His Ile Ser Tyr Leu Ala Ser Ser Arg Gln Ser Leu Leu Leu Gly Asp  
 305 310 315 320



Asp Ser Cys Asn Pro Ser His Leu Trp Leu Glu Ala Ser Lys Glu Ser  
                   325                  330                  335  
 Glu His Asp Gln Gln Ala Glu Glu Ser Gln Ser Val Pro Lys Asp Ile  
                   340                  345                  350  
 Phe Thr Phe Ser Ser Arg Pro Arg Ser Ala Pro His Gly Lys Thr Gln  
                   355                  360                  365  
 Thr Met Ser Pro Glu Glu Leu Ser Phe Ile Leu Asp Leu Lys Glu Asp  
                   370                  375                  380  
 Asn Ser Val Thr Ser Arg Asp Thr Gln Ser Glu Asp Asp Phe Tyr Gly  
 385                  390                  395                  400  
 Gly Asp Ser Ser Glu Glu Glu Tyr Asp Trp Arg Asn Tyr Gln Pro Ser  
                   405                  410                  415  
 Gln Met Ser Glu Ser Glu Leu Gln Met Leu Ala Ser Leu Arg Trp Gln  
                   420                  425                  430  
 Gln Asn Glu Glu Leu Glu Asp Ala Gly Thr Ser His Gly Leu Ser Ala  
                   435                  440                  445  
 Ser Gln Val Asp Asn Cys Asn Val Ser Ile Ser Thr Ser Ser Asp Asp  
                   450                  455                  460  
 Thr Thr Thr Trp Asn Ser Cys Leu Pro Pro Pro Val Asn Gln Gly Arg  
 465                  470                  475                  480  
 His Tyr Gln Lys Glu Met Asn Pro Pro Ser Pro Ser Asn Pro Arg Asp  
                   485                  490                  495  
 Trp Leu Asn Met Leu Ser Pro Pro Ile Val Pro Pro Ser Gln Gln Pro  
                   500                  505                  510  
 Ala Glu Gln Arg Pro Asp Ser Cys Glu Ser Leu Ser Val Gln Gly Glu  
                   515                  520                  525  
 Glu Asp Leu Ser Val Glu Glu Asp Glu Glu Val Leu Thr Leu Leu Tyr  
                   530                  535                  540  
 Asp Pro Cys Leu Asn Cys Tyr Phe Asp Pro Gln Thr Gly Lys Tyr Tyr  
 545                  550                  555                  560  
 Glu Leu Val

&lt;210&gt; 3627

&lt;211&gt; 512

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3627

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Met Asn Val Arg Ile Asp Pro Ser Ser Leu Ser Phe Asn Met Trp Lys
  1             5             10             15
Glu Ile Pro Ile Pro Phe Tyr Leu Ser Val Tyr Phe Phe Asp Val Met
      20             25             30
Asn Pro Ser Glu Ile Leu Lys Gly Glu Lys Pro Gln Val Arg Glu Arg
      35             40             45
Gly Pro Tyr Val Tyr Arg Glu Phe Arg His Lys Ser Asn Ile Thr Phe
      50             55             60
Asn Asn Asn Asp Thr Val Ser Phe Leu Glu Tyr Arg Thr Phe Gln Phe
      65             70             75             80
Gln Pro Ser Lys Ser His Gly Ser Glu Ser Asp Tyr Ile Val Met Pro
      85             90             95
Asn Ile Leu Val Leu Gly Ala Ala Val Met Met Glu Asn Lys Pro Met
      100            105            110
Thr Leu Lys Leu Ile Met Thr Leu Ala Phe Thr Thr Leu Gly Glu Arg
      115            120            125
Ala Phe Met Asn Arg Thr Val Gly Glu Ile Met Trp Gly Tyr Lys Asp
      130            135            140
Pro Leu Val Asn Leu Ile Asn Lys Tyr Phe Pro Gly Met Phe Pro Phe
      145            150            155            160
Lys Asp Lys Phe Gly Leu Phe Ala Glu Leu Asn Asn Ser Asp Ser Gly
      165            170            175
Leu Phe Thr Val Phe Thr Gly Val Gln Asn Ile Ser Arg Ile His Leu
      180            185            190
Val Asp Lys Trp Asn Gly Leu Ser Lys Val Asp Phe Trp His Ser Asp
      195            200            205
Gln Cys Asn Met Ile Asn Gly Thr Ser Gly Gln Met Trp Pro Pro Phe
      210            215            220
Met Thr Pro Glu Ser Ser Leu Glu Phe Tyr Ser Pro Glu Ala Cys Arg
      225            230            235            240
Ser Met Lys Leu Met Tyr Lys Glu Ser Gly Val Phe Glu Gly Ile Pro
      245            250            255

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Thr Tyr Arg Phe Val Ala Pro Lys Thr Leu Phe Ala Asn Gly Ser Ile  
 260 265 270  
 Tyr Pro Pro Asn Glu Gly Phe Cys Pro Cys Leu Glu Ser Gly Ile Gln  
 275 280 285  
 Asn Val Ser Thr Cys Arg Phe Ser Ala Pro Leu Phe Leu Ser His Pro  
 290 295 300  
 His Phe Leu Asn Ala Asp Pro Val Leu Ala Glu Ala Val Thr Gly Leu  
 305 310 315 320  
 His Pro Asn Gln Glu Ala His Ser Leu Phe Leu Asp Ile His Pro Val  
 325 330 335  
 Thr Gly Ile Pro Met Asn Cys Ser Val Lys Leu Gln Leu Ser Leu Tyr  
 340 345 350  
 Met Lys Ser Val Ala Gly Ile Gly Gln Thr Gly Lys Ile Glu Pro Val  
 355 360 365  
 Val Leu Pro Leu Leu Trp Phe Ala Glu Ser Gly Ala Met Glu Gly Glu  
 370 375 380  
 Thr Leu His Thr Phe Tyr Thr Gln Leu Val Leu Met Pro Lys Val Met  
 385 390 395 400  
 His Tyr Ala Gln Tyr Val Leu Leu Ala Leu Gly Cys Val Leu Leu Leu  
 405 410 415  
 Val Pro Val Ile Cys Gln Ile Arg Ser Gln Val Gly Ala Gly Gln Arg  
 420 425 430  
 Ala Ala Arg Ala Asp Ser His Ser Leu Ala Cys Trp Gly Lys Gly Ala  
 435 440 445  
 Ser Asp Arg Thr Leu Trp Pro Thr Ala Ala Trp Ser Pro Pro Pro Ala  
 450 455 460  
 Ala Val Leu Arg Leu Cys Arg Ser Gly Ser Gly His Cys Trp Gly Leu  
 465 470 475 480  
 Arg Ser Thr Leu Ala Ser Phe Ala Cys Arg Val Ala Thr Thr Leu Pro  
 485 490 495  
 Val Leu Glu Gly Leu Gly Pro Ser Leu Gly Gly Gly Thr Gly Gly Leu  
 500 505 510

&lt;210&gt; 3628

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

```

Met Glu Asn Ser Gly Lys Ala Asn Lys Lys Asp Thr His Asp Gly Pro
  1              5              10              15
Pro Lys Glu Ile Lys Leu Pro Thr Ser Glu Ala Leu Leu Asp Tyr Gln
      20              25              30
Cys Gln Ile Lys Glu Asp Ala Val Glu Gln Phe Met Phe Gln Ile Lys
      35              40              45
Thr Leu Arg Lys Lys Asn Gln Lys Tyr His Glu Arg Asn Ser Arg Leu
      50              55              60
Lys Glu Glu Gln Ile Trp His Ile Arg His Leu Leu Lys Glu Leu Ser
      65              70              75              80
Glu Glu Lys Ala Glu Gly Leu Pro Val Val Thr Arg Glu Asp Val Glu
      85              90              95
Glu Ala Met Lys Glu Lys Trp Lys Phe Glu Arg Asp Gln Glu Lys Asn
      100             105             110
Leu Arg Asp Met Arg Met Gln Ile Ser Asn Ala Glu Lys Leu Phe Leu
      115             120             125
Glu Lys Leu Ser Glu Lys Glu Tyr Trp Glu Glu Tyr Lys Asn Val Gly
      130             135             140
Ser Glu Arg His Ala Lys Leu Ile Thr Ser Leu Gln Asn Asp Ile Asn
      145             150             155             160
Thr Val Lys Glu Asn Ala Glu Lys Met Ser Glu His Tyr Lys Ile Thr
      165             170             175
Leu Glu Asp Thr Arg Lys Lys Ile Ile Lys Glu Thr Leu Leu Gln Leu
      180             185             190
Asp Gln Lys Lys Glu Trp Ala Thr Gln Asn Ala Val Lys Leu Ile Asp
      195             200             205
Lys Gly Ser Tyr Leu Glu Ile Trp Glu Asn Asp Trp Leu Lys Lys Glu
      210             215             220
Val Ala Ile His Arg Lys Glu Val Glu Glu Leu Lys Asn Ala Ile His
      225             230             235             240
Glu Leu Glu Ala Glu Asn Leu Val Leu Ile Asp Gln Leu Ser Asn Cys
      245             250             255

```

Arg Leu Val Asp Leu Lys Ile Pro Arg Tyr Pro Val Leu His Ser Cys  
                   260                                  265                                  270  
 Pro Thr Ser Asn Pro Arg His Leu Leu Leu Leu Pro Leu Glu Ser Cys  
                   275                                  280                                  285  
 Leu Ile Ser Ala Arg Arg Cys Trp Arg Leu Tyr Leu Thr Gln Ala Ala  
                   290                                  295                                  300  
 Gly Leu Glu Val Pro Pro Glu Glu Met Ser Leu Glu Leu Pro Glu Thr  
 305                                  310                                  315                                  320  
 His Ile Glu Glu Lys Ser Glu Leu Gln Pro Thr Glu Val Glu Ser Arg  
                                   325                                  330                                  335  
 Asp Leu Met Ser Ser Ser Asp Glu Ser Thr Ile Leu His Leu Ser His  
                   340                                  345                                  350  
 Glu Asn Ser Ile Glu Asp Leu Gln Tyr Val Lys Ile Asp Lys Glu Glu  
                   355                                  360                                  365  
 Asn Ser Gly Thr Glu Phe Gly Asp Thr Asp Met Lys Tyr Leu Leu Tyr  
                   370                                  375                                  380  
 Glu Asp Glu Lys Asp Phe Lys Asp Tyr Val Asn Leu Gly Pro Leu Gly  
 385                                  390                                  395                                  400  
 Val Lys Leu Met Ser Val Glu Ser Lys Lys Met Pro Ile His Phe Gln  
                                   405                                  410                                  415  
 Glu Lys Glu Ile Pro Val Lys Leu Tyr Lys Asp Val Arg Ser Pro Glu  
                   420                                  425                                  430  
 Ser His Ile Thr Tyr Lys Met Met Lys Ser Phe Leu  
                   435                                  440

<210> 3629

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3629

Met Leu Ser Asn Leu His Glu Leu Leu Pro Asn His Leu Met Glu Thr  
       1                                  5                                  10                                  15  
 Leu Tyr Ser Arg Lys Ser Glu Glu Asp Lys Lys Lys Cys Glu Asn Pro

20 25 30  
 Glu Leu Ser Gly Leu Glu Arg Ile Leu Ala Arg His Gln Leu Pro Lys  
 35 40 45  
 Glu Ile Asn Leu Thr Pro Lys Pro Asn Arg Met Pro Pro Trp Lys Arg  
 50 55 60  
 Lys Ile Ile Asn Asn Val Thr Asp Gly Trp Lys Lys Cys His Leu Leu  
 65 70 75 80  
 Lys Arg Asn Thr Lys Glu Pro Pro Met Ser Thr Ile Val Val Ser Asn  
 85 90 95  
 Thr Ile Pro Ser Ile Leu Leu Pro Cys Tyr Met Ala Glu Lys Glu His  
 100 105 110  
 Ala Thr His  
 115

<210> 3630

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3630

Met Cys Lys His Gly Pro Phe Thr Phe Leu Tyr Leu Pro Cys Arg Ile  
 1 5 10 15  
 Phe Thr Lys Ile Leu Gly Gly Gly Ala Val Asn Ile Ala His Tyr Ala  
 20 25 30  
 Arg Gln Glu Val Ile Asn Val Ser Pro Gly Tyr Gln Leu Val Arg Asn  
 35 40 45  
 Arg Glu Gln Ile Ser Val Thr Leu Gly Asp Glu Met Phe Asp Arg Lys  
 50 55 60  
 Lys Arg Trp Glu Ser Glu Ile Pro Asp Lys Gly Arg Phe Ser Arg Thr  
 65 70 75 80  
 Asn Ile Ile Ser Asp Leu Glu Glu Gln Ile Ser Glu Leu Thr Ala Ile  
 85 90 95  
 Ile Glu Gln Met Asn Arg Asp His Gln Ser Ala Gln Lys Leu Gly Ala  
 100 105 110  
 Gln Arg Gly Pro

115

&lt;210&gt; 3631

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3631

```

Met Asp Thr Gln Gly Pro Val Ser Gln Pro Phe Gln Gln Pro Glu Lys
  1              5              10              15
Pro Gly Arg Val Arg Arg Arg Lys Thr Arg Arg Glu Arg Asn Lys Ala
      20              25              30
Leu Val Gly Ser Arg Arg Pro Leu Ala His His Asp Pro Pro Val Ala
      35              40              45
Ile Arg Asp Pro Pro Val Val Pro Thr Ala Ser Lys Leu Val Val Ile
      50              55              60
Thr Gln Gly Arg Leu Ser Arg Glu His Arg Gly Leu Phe Asn His Glu
      65              70              75              80
Val Lys Ser Leu Asp Val Ala Arg Leu Leu Ser Ser Gly Thr Leu Val
      85              90              95
Pro Gly Ser Pro Thr Leu Pro Ala Lys Pro Ser Pro Ser Pro Gly Arg
      100             105             110
Ala Gln Glu Pro Ala Pro Arg Ser Arg Asp Lys Glu Asn Gln Val Pro
      115             120             125
Gly Gly Ser Gly Pro Gly Pro Pro Ser Ser Pro Glu Leu Ser Gly Val
      130             135             140
Gly Gln Leu Leu Ala Glu Leu Gln Cys Gln Leu Ser Leu Pro Gln Ala
      145             150             155             160
Phe Pro Arg Arg Asn Leu Ile Gln Asp Ala Arg Asp Ala Ile Val His
      165             170             175
Thr Leu Gln Ala Cys His Gly Cys Val Pro Asp Leu Ala Leu Val Leu
      180             185             190
Arg Gly Cys Gln Pro Pro Leu Pro Gly Ala Lys Pro Gly Val Ser Glu
      195             200             205
Arg Lys Met Thr Pro Phe Trp Ile Asn Ser Pro Asp Gln Val Pro Glu

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210                      215                      220  
 Gln Glu Arg Gln Arg Lys Gln Gln Gly Thr Lys Glu Phe Thr Phe Pro  
 225                      230                      235                      240  
 Met Pro Tyr Thr Ser Ser Met Pro Thr Ala His Arg Gly Ser Leu Ala  
                     245                      250                      255  
 Pro Pro Arg Gly Pro Trp Pro Pro Tyr Phe Pro Ser Leu Ser Ser Pro  
                     260                      265                      270  
 Ser Gly Thr Ala Trp Gly Pro Pro Thr Ala Phe Asp Leu Leu Lys Ser  
                     275                      280                      285  
 Ile Trp Leu Val Ala Thr Pro Pro Pro Pro Arg Pro Trp Gly Val Gly  
                     290                      295                      300  
 Leu Pro Gln Pro Leu Pro Gln Pro Ser Ser Pro Leu Leu Pro Arg Thr  
 305                      310                      315                      320  
 Ser Val Leu Asp Trp Ser Pro Ser Pro Pro Ser Pro Leu Pro Ser Leu  
                     325                      330                      335  
 Ser Trp Val Val Ala Gln Ser Ser Pro Glu Ala Trp Ser Phe Pro Pro  
                     340                      345                      350  
 Met Arg Leu Tyr  
                     355

<210> 3632

<211> 571

<212> PRT

<213> Homo sapiens

<400> 3632

Met Val Gly Glu Gly Pro Tyr Leu Ile Ser Asp Leu Asp Gln Arg Gly  
   1                      5                      10                      15  
 Arg Arg Arg Ser Phe Ala Glu Arg Tyr Asp Pro Ser Leu Lys Thr Met  
                     20                      25                      30  
 Ile Pro Val Arg Pro Cys Ala Arg Leu Ala Pro Asn Pro Val Asp Asp  
                     35                      40                      45  
 Ala Gly Leu Leu Ser Phe Ala Thr Phe Ser Trp Leu Thr Pro Val Met  
                     50                      55                      60  
 Val Lys Gly Tyr Arg Gln Arg Leu Thr Val Asp Thr Leu Pro Pro Leu



65	70	75	80
Ser Thr Tyr Asp	Ser Ser Asp Thr Asn Ala Lys Arg Phe Arg Val Leu		
	85	90	95
Trp Asp Glu Glu Val Ala Arg Val Gly Pro Glu Lys Ala Ser Leu Ser			
	100	105	110
His Val Val Trp Lys Phe Gln Arg Thr Arg Val Leu Met Asp Ile Val			
	115	120	125
Ala Asn Ile Leu Cys Ile Ile Met Ala Ala Ile Gly Pro Thr Val Leu			
	130	135	140
Ile His Gln Ile Leu Gln Gln Thr Glu Arg Thr Ser Gly Lys Val Trp			
145	150	155	160
Val Gly Ile Gly Leu Cys Ile Ala Leu Phe Ala Thr Glu Phe Thr Lys			
	165	170	175
Val Phe Phe Trp Ala Leu Ala Trp Ala Ile Asn Tyr Arg Thr Ala Ile			
	180	185	190
Arg Leu Lys Val Ala Leu Ser Thr Leu Val Phe Glu Asn Leu Val Ser			
	195	200	205
Phe Lys Thr Leu Thr His Ile Ser Val Gly Glu Val Leu Asn Ile Leu			
	210	215	220
Ser Ser Asp Ser Tyr Ser Leu Phe Glu Ala Ala Leu Phe Cys Pro Leu			
225	230	235	240
Pro Ala Thr Ile Pro Ile Leu Met Val Phe Cys Val Ala Tyr Ala Phe			
	245	250	255
Phe Ile Leu Gly Pro Thr Ala Leu Ile Gly Ile Ser Val Tyr Val Ile			
	260	265	270
Phe Ile Pro Val Gln Met Phe Met Ala Lys Leu Asn Ser Ala Phe Arg			
	275	280	285
Arg Ser Ala Ile Leu Val Thr Asp Lys Arg Val Gln Thr Met Asn Glu			
	290	295	300
Phe Leu Thr Cys Ile Arg Leu Ile Lys Met Tyr Ala Trp Glu Lys Ser			
305	310	315	320
Phe Thr Asn Thr Ile Gln Asp Ile Arg Arg Arg Glu Arg Lys Leu Leu			
	325	330	335
Glu Lys Ala Gly Phe Val Gln Ser Gly Asn Ser Ala Leu Ala Pro Ile			
	340	345	350
Val Ser Thr Ile Ala Ile Val Leu Thr Leu Ser Cys His Ile Leu Leu			

355	360	365
Arg Arg Lys Leu Thr Ala Pro Val Ala Phe Ser Val Ile Ala Met Phe		
370	375	380
Asn Val Met Lys Phe Ser Ile Ala Ile Leu Pro Phe Ser Ile Lys Ala		
385	390	395
Met Ala Glu Ala Asn Val Ser Leu Arg Arg Met Lys Lys Ile Leu Ile		
405	410	415
Asp Lys Ser Pro Pro Ser Tyr Ile Thr Gln Pro Glu Asp Pro Asp Thr		
420	425	430
Val Leu Leu Leu Ala Asn Ala Thr Leu Thr Trp Glu His Glu Ala Ser		
435	440	445
Arg Lys Ser Thr Pro Lys Lys Leu Gln Asn Gln Lys Arg His Leu Cys		
450	455	460
Lys Lys Gln Arg Ser Glu Ala Tyr Ser Glu Arg Ser Pro Pro Ala Lys		
465	470	475
Gly Ala Thr Gly Pro Glu Glu Gln Ser Asp Ser Leu Lys Ser Val Leu		
485	490	495
His Ser Ile Ser Phe Val Val Arg Lys Gly Lys Ile Leu Gly Ile Cys		
500	505	510
Gly Asn Val Gly Ser Gly Lys Ser Ser Leu Leu Ala Ala Leu Leu Gly		
515	520	525
Gln Met Gln Leu Gln Lys Gly Val Val Ala Val Asn Gly Thr Leu Ala		
530	535	540
Tyr Val Ser Gln Gln Ala Trp Ile Phe His Gly Asn Val Arg Glu Asn		
545	550	555
Ile Leu Phe Gly Glu Lys Tyr Asp His Gln Arg		
565	570	

&lt;210&gt; 3633

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3633

Met Pro Gln Pro Ser Val Ser Gly Met Asp Pro Pro Phe Gly Asp Ala

1	5	10	15
Phe Arg Ser His Thr Phe Ser Glu Gln Thr Leu Met Ser Thr Asp Leu			
20	25	30	
Leu Ala Asn Ser Ser Asp Pro Asp Phe Met Tyr Glu Leu Asp Arg Glu			
35	40	45	
Met Asn Tyr Gln Gln Asn Pro Arg Asp Asn Phe Leu Ser Leu Glu Asp			
50	55	60	
Cys Lys Asp Ile Glu Asn Leu Glu Ser Phe Thr Asp Val Leu Asp Asn			
65	70	75	80
Glu Gly Ala Leu Thr Ser Asn Trp Glu Gln Trp Asp Thr Tyr Cys Glu			
85	90	95	
Asp Leu Thr Lys Tyr Thr Lys Leu Thr Ser Cys Asp Ile Trp Gly Thr			
100	105	110	
Lys Glu Val Asp Tyr Leu Gly Leu Asp Asp Phe Ser Ser Pro Tyr Gln			
115	120	125	
Asp Glu Glu Val Ile Ser Lys Thr Pro Thr Leu Ala Gln Leu Asn Ser			
130	135	140	
Glu Asp Ser Gln Ser Val Ser Asp Ser Leu Tyr Tyr Pro Asp Ser Leu			
145	150	155	160
Phe Ser Val Lys Gln Asn Pro Leu Pro Ser Ser Phe Pro Gly Lys Lys			
165	170	175	
Ile Thr Ser Arg Ala Ala Ala Pro Val Cys Ser Ser Lys Thr Leu Gln			
180	185	190	
Ala Glu Val Pro Leu Ser Asp Cys Val Gln Lys Ala Ser Lys Pro Thr			
195	200	205	
Ser Ser Thr Gln Ile Met Val Lys Thr Asn Met Tyr His Asn Glu Lys			
210	215	220	
Val Asn Phe His Val Glu Cys Lys Asp Tyr Val Lys Lys Ala Lys Val			
225	230	235	240
Lys Ile Asn Pro Val Gln Gln Ser Arg Pro Leu Leu Ser Gln Ile His			
245	250	255	
Thr Asp Ala Ala Lys Glu Asn Thr Cys Tyr Cys Gly Ala Val Ala Lys			
260	265	270	
Arg Gln Glu Lys Lys Gly Met Glu Pro Leu Gln Gly His Ala Thr Pro			
275	280	285	

Ala Leu Pro Phe Lys Glu Thr Gln Glu Leu Leu Leu Ser Pro Leu Pro  
 290 295 300  
 Gln Glu Gly Pro Gly Ser Leu Ala Ala Gly Glu Ser Ser Ser Leu Ser  
 305 310 315 320  
 Ala Ser Thr Ser Val Ser Asp Ser Ser Gln Lys Lys Glu Glu His Asn  
 325 330 335  
 Tyr Ser Leu Phe Val Ser Asp Asn Leu Gly Glu Gln Pro Thr Lys Cys  
 340 345 350  
 Ser Pro Glu Glu Asp Glu Glu Asp Glu Glu Asp Val Asp Asp Glu Asp  
 355 360 365  
 His Asp Glu Gly Phe Gly Ser Glu His Glu Leu Ser Glu Asn Glu Glu  
 370 375 380  
 Glu Glu Glu Glu Glu Glu Asp Tyr Glu Asp Asp Lys Asp Asp Asp Ile  
 385 390 395 400  
 Ser Asp Thr Phe Ser Glu Pro Gly Ile Ile Met Leu Ala Ser Leu Pro  
 405 410 415  
 Asp

<210> 3634

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3634

Met Trp Arg Gln Glu Glu Glu Leu Arg Asp Gln Glu Lys Leu Arg Lys  
 1 5 10 15  
 His Glu Glu Lys Thr Trp Arg Gln Glu Gln Arg Leu Arg Asp Gln Glu  
 20 25 30  
 Lys Glu Leu Arg Lys Gln Glu Lys Gln Met Leu Lys Gln Lys Glu Gln  
 35 40 45  
 Met Ala Glu Gln Glu Glu Gln Met Gln Lys Gln Glu Glu Gln Val Arg  
 50 55 60  
 Lys Gln Glu Glu Gln Val Arg Lys Gln Glu Glu Gln Met Trp Lys Gln

65                      70                      75                      80  
 Glu Glu Gln Met Arg Lys Gln Glu Glu Gln Met Arg Lys Gln Glu Lys  
                          85                      90                      95  
 Gln Met Gly Glu Gln Glu Glu Gln Met Arg Lys Arg Glu Glu Gln Met  
                          100                      105                      110  
 Arg Lys Arg Glu Glu Gln Ile Thr Gln Leu Pro Pro Gly Met Lys Asn  
                          115                      120                      125  
 Thr Gln Glu His Pro Gly Leu Gly Ser Thr Ser Cys Ile Leu Phe Phe  
                          130                      135                      140  
 Tyr Arg Gly Asp Lys Lys Lys Ile Lys Ile Ile Asn Ile  
 145                      150                      155

<210> 3635

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3635

Met Thr Pro Pro Met Arg Thr Gln Gly Thr Glu Thr Lys Ser Lys Lys  
   1                      5                      10                      15  
 Ala Leu Arg Val Glu Gly Ser Ser Gly Ala Lys Gly Arg Val Arg Ala  
                          20                      25                      30  
 Thr Pro Ala Arg Arg His Phe Gln Thr Asp Leu Pro Ala Pro Arg Asn  
                          35                      40                      45  
 Arg Ser Arg Pro Pro Ser Ser Cys Ile Leu Asp Pro Thr Gln Thr Arg  
                          50                      55                      60  
 Ser Arg Thr His Leu Pro Arg Ala Pro Gln Thr Leu Thr Ala Ser Gly  
   65                      70                      75                      80  
 Ala Ala Asp Thr Asp Gln Val Pro His Ser Leu Gly Leu Gln Gly Arg  
                          85                      90                      95  
 Ser Arg Arg Pro Leu Thr Leu Arg Glu Ala Leu Thr Asp Gly Ala Leu  
                          100                      105                      110  
 Pro Arg Leu Ala Ser Thr Pro Arg Gln Arg Leu Pro Ile Ala Val Arg  
                          115                      120                      125  
 Leu Pro Gly Ile Gly Pro Ala Ala Thr Pro Ala Cys Arg Pro Arg Gly

130                      135                      140  
 Thr Val Ala Leu Pro Val Pro Glu Gly Thr Arg Asp Thr Cys Ser Thr  
 145                      150                      155                      160  
 Ala Ile Pro Tyr Thr Cys Glu Ala Pro  
                          165

<210> 3636

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3636

Met Ile His Leu Lys Gly Ser Ser Ser Gly Glu Ser Gln Tyr Leu Pro  
   1                      5                      10                      15  
 Gln His Cys Arg Met Gly Arg Ser Leu Pro Pro Thr His Ser Thr His  
                          20                      25                      30  
 Leu Thr Pro Pro Phe Gln Gly Lys Asp Leu Arg Ala Ala Gly Glu Ser  
                          35                      40                      45  
 Glu Ile Gly Arg His Gly Ala Asn Trp Ala Thr Ala Arg Asp Leu Glu  
                          50                      55                      60  
 Pro Thr Pro Leu Asn Ser Glu His Arg Lys Arg Arg Gln Ala Arg Arg  
   65                      70                      75                      80  
 Gly Gln Glu Ala Asp Thr Arg Ala Gly Gln Arg Asn Gly Gly Glu His  
                          85                      90                      95  
 Thr His Ala Leu Arg Ser Lys Ala Glu Arg Cys Glu Phe Thr Lys Thr  
                          100                      105                      110  
 Gly Val His Arg Pro Ile Thr Asp Thr Asp Pro Gly Trp Pro Gly Ala  
                          115                      120                      125  
 Pro His Thr Gly  
                          130

<210> 3637

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3637

```

Met Glu Cys Asn Gly Leu Ile Leu Ala His Cys Asn Leu Cys Leu Pro
 1             5             10             15
Gly Ser Gly Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr
          20             25             30
Gly Thr His His Cys Thr Gln Leu Ile Phe Val Phe Leu Val Glu Thr
          35             40             45
Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser
          50             55             60
Asp Leu Pro Ala Ser Ala Ser Gln Asn Ala Gly Ile Thr Gly Val Ser
          65             70             75             80
His Trp Ala Trp Thr Leu Phe Phe Tyr Phe Leu Asn Lys Leu Thr Phe
          85             90             95
Ala Leu Gln Thr His Pro Glu Phe Phe Phe Phe Phe Phe Phe Glu Thr
          100            105            110
Gly Ser His Cys Val Ala Gln Val Glu Trp His Tyr Leu Gly Ser Leu
          115            120            125
Gln Pro Pro Pro Pro Arg Phe Lys
          130            135

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<210> 3638

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3638

```

Met Met Gly Ile Phe Asn Gly Lys Ala Val Thr Gln Pro Lys Arg Gly
 1             5             10             15
Thr Ile Ser Glu Ala Ser Arg Gln Lys Ser Leu Asp Arg Arg Ser Asn
          20             25             30
Glu Pro Gly Arg Glu His Arg Ala Gly Ala His Val Glu Asn Leu Leu
          35             40             45
Arg Asn Leu Leu Glu Ala Glu Lys Thr Leu Gly Lys Ser Ser Ser His

```

50                      55                      60  
 Gly Ser Gly Ile Pro Trp Ile Val Arg Pro Ala Phe Val Phe Ser Leu  
 65                      70                      75                      80  
 Ser Leu Phe Leu Ala Val Pro Pro Gly Ser His Ser Cys Ser Arg Asn  
                     85                      90                      95  
 Gln Ala Arg Ser Gly Cys Ile Phe Trp Arg Leu Asn Asn Lys Lys Gln  
                     100                      105                      110  
 Thr Asn

<210> 3639

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3639

Met Phe Ile Trp Asn Leu Ile Ser Thr Trp Gly Leu Val Ile Thr Trp  
 1                      5                      10                      15  
 Val Leu Gly Ile His Leu Gly Leu Glu Tyr Pro Pro Gly Ala Leu Ser  
                     20                      25                      30  
 Phe Thr Arg Asp Ser Cys Leu Pro Trp Thr Trp Val Tyr Ile Cys Cys  
                     35                      40                      45  
 Leu Met Tyr Thr Leu Arg Val Met Ser Thr Trp Gly Gln Met Ser Ser  
                     50                      55                      60  
 Trp Gly Leu Ser Val His Leu Val Ser Asp Val Cys Leu Gly Thr Cys  
 65                      70                      75                      80  
 Val His Leu Arg Pro Asp Ile His Leu Gly Thr Gly Arg Pro Arg Gly  
                     85                      90                      95  
 Ala Asp Val Gln Leu Asp Thr Gly Tyr Pro Pro Gly Ala Trp Gly Ser  
                     100                      105                      110  
 Ile Gln Lys Leu Met Ser Asn Trp Gly Leu Met Ser Thr Cys Gly Leu  
                     115                      120                      125  
 Gly Ile His Val Arg Leu Asp Val His Pro Arg Pro Asp Val His Leu  
                     130                      135                      140  
 Met Leu Asp Val His Leu Thr Pro Gly Cys Leu Leu Glu Thr Ser Cys



Pro Thr Arg Ile

<210> 3640  
<211> 459  
<212> PRT  
<213> Homo sapiens

<400> 3640																	
Met	Ala	Gly	Thr	Arg	Trp	Val	Leu	Gly	Ala	Leu	Leu	Arg	Gly	Cys	Gly		
1				5					10					15			
Cys	Asn	Cys	Ser	Ser	Cys	Arg	Arg	Thr	Gly	Ala	Ala	Cys	Leu	Pro	Phe		
			20					25					30				
Tyr	Ser	Ala	Ala	Ala	Ala	Ala	Ser	Gln	Thr	Arg	Gly	Leu	Gln	Thr	Gly		
		35					40					45					
Pro	Val	Pro	Pro	Gly	Arg	Leu	Ala	Gly	Pro	Pro	Ala	Val	Ala	Thr	Ser		
	50					55					60						
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ser	Tyr	Pro	Ala	Leu	Arg	Ala	Ser	Leu		
65					70					75					80		
Leu	Pro	Gln	Ser	Leu	Ala	Ala	Ala	Ala	Ala	Val	Pro	Thr	Arg	Ser	Tyr		
				85					90					95			
Ser	Gln	Glu	Ser	Lys	Thr	Thr	Tyr	Leu	Glu	Asp	Leu	Pro	Pro	Pro	Pro		
			100					105					110				
Glu	Tyr	Glu	Leu	Ala	Pro	Ser	Lys	Leu	Glu	Glu	Glu	Val	Asp	Asp	Val		
		115					120					125					
Phe	Leu	Ile	Arg	Ala	Gln	Gly	Leu	Pro	Trp	Ser	Cys	Thr	Met	Glu	Asp		
	130					135					140						
Val	Leu	Asn	Phe	Phe	Ser	Asp	Cys	Arg	Ile	Arg	Asn	Gly	Glu	Asn	Gly		
145					150					155					160		
Ile	His	Phe	Leu	Leu	Asn	Arg	Asp	Gly	Lys	Arg	Arg	Gly	Asp	Ala	Leu		
			165					170					175				
Ile	Glu	Met	Glu	Ser	Glu	Gln	Asp	Val	Gln	Lys	Ala	Leu	Glu	Lys	His		
			180					185					190				
Arg	Met	Tyr	Met	Gly	Gln	Arg	Tyr	Val	Glu	Val	Tyr	Glu	Ile	Asn	Asn		

195	200	205
Glu Asp Val Asp Ala Leu Met Lys Ser Leu Gln Val Lys Ser Ser Pro		
210	215	220
Val Val Asn Asp Gly Val Val Arg Leu Arg Gly Leu Pro Tyr Ser Cys		
225	230	235
Asn Glu Lys Asp Ile Val Asp Phe Phe Ala Gly Leu Asn Ile Val Asp		
245	250	255
Ile Thr Phe Val Met Asp Tyr Arg Gly Arg Arg Lys Thr Gly Glu Ala		
260	265	270
Tyr Val Gln Phe Glu Glu Pro Glu Met Ala Asn Gln Ala Leu Leu Lys		
275	280	285
His Arg Glu Glu Ile Gly Asn Arg Tyr Ile Glu Ile Phe Pro Ser Arg		
290	295	300
Arg Asn Glu Val Arg Thr His Val Gly Ser Tyr Lys Gly Lys Lys Ile		
305	310	315
Ala Ser Phe Pro Thr Ala Lys Tyr Ile Thr Glu Pro Glu Met Val Phe		
325	330	335
Glu Glu His Glu Val Asn Glu Asp Ile Gln Pro Met Thr Ala Phe Glu		
340	345	350
Ser Glu Lys Glu Ile Glu Leu Pro Lys Glu Val Pro Glu Lys Leu Pro		
355	360	365
Glu Ala Ala Asp Phe Gly Thr Thr Ser Ser Leu His Phe Val His Met		
370	375	380
Arg Gly Leu Pro Phe Gln Ala Asn Ala Gln Asp Ile Ile Asn Phe Phe		
385	390	395
Ala Pro Leu Lys Pro Val Arg Ile Thr Met Glu Tyr Ser Ser Ser Gly		
405	410	415
Lys Ala Thr Gly Glu Ala Asp Val His Phe Glu Thr His Glu Asp Ala		
420	425	430
Val Ala Ala Met Leu Lys Asp Arg Ser His Val His His Arg Tyr Ile		
435	440	445
Glu Leu Phe Leu Asn Ser Cys Pro Lys Gly Lys		
450	455	

&lt;210&gt; 3641

&lt;211&gt; 572

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3641

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Met Pro Val Tyr Cys Lys Tyr Gln Phe His Lys Thr Pro Val His Lys
 1              5              10              15
Thr Lys Gly Glu Pro His Gly Thr His Val Tyr Phe Gln Asp Ile Asn
      20              25              30
Val Ile Phe Leu Gly Ala Leu His Pro Ser Asp Leu Arg Glu Tyr Leu
      35              40              45
Glu Gly Pro Pro Met Val Val Glu Val His Asp Arg Asp Arg Lys Ser
      50              55              60
Glu Glu Cys Ser Gln Lys Pro Val Leu Phe Gly Glu Asp Pro Leu Asp
      65              70              75              80
Ser Tyr Leu Asn Phe Gln Ala Leu Ile Ser Pro Arg Glu Thr Glu Asn
      85              90              95
Asn Pro Phe Glu Ser Gln Asn Lys Met Trp Tyr Pro Tyr Gly Ile Ala
      100             105             110
Gln Val Ser Phe Ala Asp Leu Leu Leu Gly His Lys Tyr Leu Asn Leu
      115             120             125
Ala Val Pro Ile His Ser Cys Glu Val Gln Pro Thr His Cys Gly Gln
      130             135             140
Asp Ser Arg Arg Arg Lys Val Val Gly Leu Gly Val Pro Arg Asp Gly
      145             150             155             160
His Gln His Gly Pro Met Pro Arg Gly Asn Tyr Leu Glu Ala Asp Ser
      165             170             175
Gln Leu Lys Leu Arg Val Asp Ile Ala Val Pro Leu Arg Ala Gly Ala
      180             185             190
Arg Ala Ala Asp Pro Asp Leu Gly Gly Ser Gln Phe Gly Arg Ile Ile
      195             200             205
Phe Val Phe Asp Phe Lys Lys Val Ser Leu Leu His Ser Leu Leu Gln
      210             215             220
Asp Ile Thr Met Ile Asn Ala Lys Ala Leu Gly Leu Asp Ser Tyr Pro
      225             230             235             240
Val Arg Thr Leu Gln Gln Ile Leu Ser Ala Phe Lys Val Arg Val Arg

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245	250	255
Val Gln Glu Gln Gln His Leu Asp	Val Leu Thr Gly Phe His Leu Leu	
260	265	270
Asp Gly Lys Thr His Leu Phe Ile	Leu Glu Gly Leu Ala Asp Gln Gly	
275	280	285
Leu Arg Gln Leu Trp Glu Asn His	Gln Ser Trp Ile Pro Arg Ser Glu	
290	295	300
His Arg Lys Tyr Lys Val Leu Tyr	Asn Ser Gln Leu Leu Phe Arg Ser	
305	310	315
Arg Leu Tyr Gly Asp Leu Glu Ala	Ile Leu Tyr His Val His Leu Phe	
325	330	335
Gln Pro Thr Glu Leu Leu Leu Gln	Gln Ala Val Phe Phe Leu Arg Asp	
340	345	350
Thr Glu Arg Arg Arg Val Phe Gln	Ala Leu Ala Arg Ile His Asp Ile	
355	360	365
Cys Tyr Asn Ser Thr Thr Leu Trp	Asp Val Thr Val Arg Asp Leu Leu	
370	375	380
Pro Ser Ser Ala Met Ile Lys Asp	Leu Ser Gln Glu Phe Gly Met Pro	
385	390	395
Leu Ser Gln Glu Glu Leu Thr Asp	Glu Lys Leu Phe Ala Leu Pro Pro	
405	410	415
Gln Pro Ala Pro Asn Leu Glu Asp	Tyr His Ser Arg Asn Ser Thr Leu	
420	425	430
Thr Leu Glu Ile His Ala His Gln	Glu Pro Arg Lys Arg Phe Thr Tyr	
435	440	445
Ser Gln Asp Tyr Leu Ser Ala Met	Val Glu Pro Leu Asp Leu Lys Glu	
450	455	460
Glu Glu Lys Lys Ala Gln Lys Lys	Ser Arg Gln Ala Trp Leu Thr Ala	
465	470	475
Arg Gly Phe Gln Val Thr Gly Leu	Gln Ser Asp Thr Glu Ser Ser Phe	
485	490	495
Gln Asp Leu Lys Leu Pro Pro Ile	Lys Glu Leu Asn Glu Glu Trp Lys	
500	505	510
Glu Asn Ser Leu Phe Ala Asn Val	Leu Glu Pro Val Leu Asp Arg Asp	
515	520	525
Arg Trp Ser Trp Asp Arg His His	Val Asp Phe Asp Leu Tyr Lys Lys	

530                      535                      540  
 Pro Pro Pro Phe Leu Glu Leu Leu Pro Ser Pro Ala Pro Lys Pro Val  
 545                      550                      555                      560  
 Thr Val Arg Lys Lys Lys Gly Asn Ser Pro Ile Ser  
                     565                      570

<210> 3642

<211> 673

<212> PRT

<213> Homo sapiens

<400> 3642

Met Asp His Ser Cys Thr Arg Phe Ile His Arg Arg Gly Pro Pro Thr  
   1                      5                      10                      15  
 Arg Thr Arg Ala Gly Phe Lys Arg Gly Lys Arg Pro Arg Ile Gln Gln  
                     20                      25                      30  
 Arg Pro Arg Ala Arg Val Ser Gly Thr Ile Pro Ala Ser Arg Leu His  
                     35                      40                      45  
 Pro Ala Pro Ala Ser Gln Pro Gly Pro Cys Pro Ala Pro Gly His Cys  
                     50                      55                      60  
 Pro Val Gly Pro Ala His Glu Arg Pro Met Gly Ser Ser Gln Glu Glu  
   65                      70                      75                      80  
 Gly Leu Arg Cys Gln Pro Ser Gln Pro Asp His Asp Ala Asp Gly His  
                     85                      90                      95  
 Cys Gly Pro Asp Leu Glu Gly Ala Glu Arg Ala Ser Ala Thr Pro Gly  
                     100                      105                      110  
 Pro Pro Gly Leu Leu Asn Ser His Arg Pro Ala Asp Ser Asp Asp Thr  
                     115                      120                      125  
 Asn Ala Ala Gly Pro Ser Ala Ala Leu Leu Glu Gly Leu Leu Leu Gly  
                     130                      135                      140  
 Gly Gly Lys Pro Ser Pro His Ser Thr Arg Pro Gly Pro Phe Phe Tyr  
   145                      150                      155                      160  
 Ile Gly Gly Ser Asn Gly Ala Thr Ile Ile Ser Ser Tyr Cys Lys Ser  
                     165                      170                      175  
 Lys Gly Trp Gln Arg Ile His Asp Ser Arg Arg Asp Asp Tyr Thr Leu

180	185	190
Lys Trp Cys Glu Val Lys Ser Arg Asp Ser Tyr Gly Ser Phe Arg Glu		
195	200	205
Gly Glu Gln Leu Leu Asp Gln Leu Pro Asn Asn Lys Leu Leu Thr Thr		
210	215	220
Lys Ile Gly Leu Leu Ser Thr Leu Arg Gly Arg Ala Arg Ala Met Ser		
225	230	235
Lys Ala Ser Lys Val Pro Gly Gly Val Gln Ala Arg Leu Glu Lys Asp		
245	250	255
Ala Ala Ala Pro Ala Leu Glu Asp Leu Pro Trp Thr Ser Pro Gly Tyr		
260	265	270
Leu Arg Pro Gln Arg Val Leu Arg Met Glu Glu Phe Phe Pro Glu Thr		
275	280	285
Tyr Arg Leu Asp Leu Lys His Glu Arg Glu Ala Phe Phe Thr Leu Phe		
290	295	300
Asp Glu Thr Gln Ile Trp Ile Cys Lys Pro Thr Ala Ser Asn Gln Gly		
305	310	315
Lys Gly Ile Phe Leu Leu Arg Asn Gln Glu Glu Val Ala Ala Leu Gln		
325	330	335
Ala Lys Thr Arg Ser Met Glu Asp Asp Pro Ile His His Lys Thr Pro		
340	345	350
Phe Arg Gly Pro Gln Ala Arg Val Val Gln Arg Tyr Ile Gln Asn Pro		
355	360	365
Leu Leu Val Asp Gly Arg Lys Phe Asp Val Arg Ser Tyr Leu Leu Ile		
370	375	380
Ala Cys Thr Thr Pro Tyr Met Ile Phe Phe Gly His Gly Tyr Ala Arg		
385	390	395
Leu Thr Leu Ser Leu Tyr Asp Pro His Ser Ser Asp Leu Gly Gly His		
405	410	415
Leu Thr Asn Gln Phe Met Gln Lys Lys Ser Pro Leu Tyr Met Leu Leu		
420	425	430
Lys Glu His Thr Val Trp Ser Met Glu His Leu Asn Arg Tyr Ile Ser		
435	440	445
Asp Thr Phe Trp Lys Ala Arg Gly Leu Ala Lys Asp Trp Val Phe Thr		
450	455	460
Thr Leu Lys Lys Arg Met Gln Gln Ile Met Ala His Cys Phe Leu Ala		

465                      470                      475                      480  
 Ala Lys Pro Lys Leu Asp Cys Lys Leu Gly Tyr Phe Asp Leu Ile Gly  
                             485                      490                      495  
 Cys Asp Phe Leu Ile Asp Asp Asn Phe Lys Val Trp Leu Leu Glu Met  
                             500                      505                      510  
 Asn Ser Asn Pro Ala Leu His Thr Asn Cys Glu Val Leu Lys Glu Val  
                             515                      520                      525  
 Ile Pro Gly Val Val Ile Glu Thr Leu Asp Leu Val Leu Glu Thr Phe  
                             530                      535                      540  
 Arg Lys Ser Leu Arg Gly Gln Lys Met Leu Pro Leu Leu Ser Gln Arg  
 545                      550                      555                      560  
 Arg Phe Val Leu Leu His Asn Gly Glu Ala Asp Pro Arg Pro His Leu  
                             565                      570                      575  
 Gly Gly Ser Cys Ser Leu Arg Arg Trp Pro Pro Leu Pro Thr Arg Gln  
                             580                      585                      590  
 Ala Lys Ser Ser Gly Pro Pro Met Pro His Ala Pro Asp Gln Pro Gly  
                             595                      600                      605  
 Ala Arg Arg Pro Ala Pro Pro Pro Leu Val Pro Gln Arg Pro Arg Pro  
                             610                      615                      620  
 Pro Gly Pro Asp Leu Asp Ser Ala His Asp Gly Glu Pro Gln Ala Pro  
 625                      630                      635                      640  
 Gly Thr Glu Gln Ser Gly Thr Gly Asn Arg His Pro Ala Gln Glu Pro  
                             645                      650                      655  
 Ser Pro Gly Thr Ala Lys Glu Glu Arg Glu Glu Pro Glu Asn Ala Arg  
                             660                      665                      670  
 Pro

<210> 3643

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3643

Met Pro Ser Phe Ala Leu Val Pro Trp Ala Ala Val Gln Trp His His

1                    5                    10                    15  
 Leu Gly Ser Pro Gln Pro Pro Pro Pro Lys Phe Lys Arg Phe Ser Cys  
                   20                    25                    30  
 Leu Ser Leu Pro Ser Ile Trp Asp Tyr Arg Tyr Ala Pro Pro Arg Pro  
                   35                    40                    45  
 Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Gly Gln  
                   50                    55                    60  
 Ala Gly Leu Glu Leu Pro Thr Ser Gly Asp Ser Pro Ala Ser Ala Ser  
                   65                    70                    75                    80  
 Gln Ser Thr Gly Ile Thr Gly Val Ser His Cys Ala Trp Pro Thr Asn  
                   85                    90                    95  
 Thr Arg Phe Tyr Ser Gly Pro Phe Thr Val Asn Val Gly Gly Pro Trp  
                   100                    105                    110  
 Arg Met Ala Thr Pro Gly Leu Phe Ala Glu Ala Trp Thr Ala Gln Gln  
                   115                    120                    125  
 Ala Glu Leu Lys Gln Leu Arg Gln Tyr Gln Leu Lys Gly His Pro Ala  
                   130                    135                    140  
 Val Arg Val Pro Arg Leu Gln Glu  
 145                    150

<210> 3644

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3644

Met Ser Arg Ala Leu Arg Pro Leu Ser Cys Leu Arg Pro Leu Ser Ser  
 1                    5                    10                    15  
 Pro Arg Ala Gly Thr Thr Gly Val Arg Val Thr Arg Thr Ser Trp Gly  
                   20                    25                    30  
 Ser Ala Trp Pro Ser Phe Gly Met Ser Pro Gly Gly Pro Arg Met Gly  
                   35                    40                    45  
 Gly Gly Trp Asp Leu Pro Asp Val His Glu Val Leu Ile His Ala Pro  
                   50                    55                    60  
 Arg Val Leu Gly Ser Asp Arg Asp Gly Asn Pro Val Leu Leu Gln Glu



65                      70                      75                      80  
 Arg Asp Ser Thr Gly Gly Gly Lys Ala Ala Gly Arg Thr Arg Glu Val  
                             85                      90                      95  
 Arg Pro Arg Gly Pro Ala Phe Ser Glu Ser Pro Lys Leu Trp Pro Pro  
                             100                      105                      110  
 Phe Arg Gln Asp Pro Gly Tyr Leu Leu Val Leu Val Thr Val Thr Ser  
                             115                      120                      125  
 Leu Gly Gly Pro Tyr Cys Trp Thr Cys Pro Arg Glu Thr Ala Gly Pro  
                             130                      135                      140  
 Cys Val Cys Asn Ala Asp Leu Gly Gly Ser Phe Gln Lys Thr Leu Ser  
 145                      150                      155                      160  
 Leu His Leu Lys Asp Pro  
                             165

<210> 3645

<211> 293

<212> PRT

<213> Homo sapiens

<400> 3645

Met Asn Val Met Asn Val Gly Arg Pro Leu Gly Leu Val His Ser Leu  
   1                      5                      10                      15  
 Phe Ser Ile Arg Glu Phe Ile Leu Lys Lys Asp Thr Met Asn Ala Met  
                             20                      25                      30  
 Ser Val Ala Lys Pro Ser Ser Ile Ala Gln Ala Leu Leu Asp Thr Arg  
                             35                      40                      45  
 Lys Phe Ile Leu Glu Lys Asn His Ile Cys Val Met Asn Val Gly Arg  
                             50                      55                      60  
 Ala Ser Gly Arg Val Leu Ser Leu Ser Gly Ile Arg Glu Phe Ile Gln  
 65                      70                      75                      80  
 Gly Thr Asn Pro Met Asn Val Met Asn Val Gly Lys Leu Leu Ala Arg  
                             85                      90                      95  
 Thr Gln Arg Leu Leu Asp Ile Leu Glu Phe Ile Leu Val Arg Ser Pro  
                             100                      105                      110  
 Met Tyr Val Arg Asn Val Gly Arg Pro Ser Gly Gly Thr Gln Asn Phe

115	120	125	
Leu Asp Met Arg Glu Phe Thr	Leu Glu Arg Asn Pro	Met Asn Ala Leu	
130	135	140	
Ser Val Glu Arg Leu Ser Gly Gly	Pro Leu Thr Leu Leu	Ser Thr Arg	
145	150	155	160
Glu Phe Ile Leu Glu Arg Asn Pro	Ile Asn Val Met Ser Val	Gln Glu	
165	170	175	
Pro Phe Gly Ile Ile Leu Ser Cys	Phe Ser Thr Arg Lys Phe	Ile Leu	
180	185	190	
Glu Arg Asn Leu Met Asn Val Ala	Ser Val Arg Lys His Leu	Ala Ser	
195	200	205	
Ile Pro Asn Leu Ser Tyr Ile Arg	Glu Phe Thr Leu Glu Arg	Ser Leu	
210	215	220	
Met Ser Ala Lys Asn Val Arg Arg	Leu Leu Val Gly Ala Leu	Thr Ser	
225	230	235	240
Ser Asp Ile Lys Val Phe Thr Val	Trp Ser Asn Leu Gln Asn	Arg Lys	
245	250	255	
Ala Phe Ser Gly Lys Ala Lys Val	Gln Leu Ile His Leu Phe	Ile Ile	
260	265	270	
Cys Lys Tyr Ala Pro Gln Val Phe	Lys Ser Asn Glu Trp Thr	Glu Pro	
275	280	285	
Pro Leu Ser Ser His			
290			

&lt;210&gt; 3646

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3646

Met Asn Arg Glu His Ser Ala Ser	Ile Pro Val Pro Leu Val Ala Leu
1	5 10 15
Gln Ser Ala Gly Thr Arg Arg Asn	Gln Lys Pro Pro Gly Arg Ala Phe
20	25 30

Cys	Leu	Tyr	Gly	Val	Lys	Ala	Val	Ser	Ser	Asn	Leu	Cys	Phe	Leu	Lys
35				40				45							
Gln	Arg	Asn	Asn	Leu	Asp	Glu	Thr	Asn	Phe	Pro	Gln	Arg	Lys	Gly	Arg
50				55				60							
Ala	His	Ser	Glu	Leu	Val	Lys	Lys	Met	Pro	Gly	Ala	Gly	Ser	Ile	Leu
65				70				75				80			
Lys	Trp	Lys	Arg	Trp	Cys	Leu	Ala	Met	Leu	Pro	Lys	Leu	Val	Leu	Asn
85				90				95							
Ser	Trp	His	Gln	Val	Ile	Leu	Leu	Pro	Gln	Pro	Pro	Lys	Val	Leu	Gly
100				105				110							
Leu	Gln	Asn	Lys	Thr	Ile	Ser	Arg	Arg	Val	Cys	Gly	Ile	Leu	Arg	Thr
115				120				125							
Asp	Thr	Gly	Arg	Asn	Lys	Gly	Tyr	Arg	Ser	Glu					
130				135											

&lt;210&gt; 3647

&lt;211&gt; 588

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3647

Met	Ala	Asn	Leu	Cys	Thr	Pro	Ser	Ser	Thr	Ala	Asn	Ser	Cys	Ser	Ser
1				5					10					15	
Ser	Ala	Ser	Asn	Thr	Pro	Gly	Ala	Pro	Glu	Thr	His	Pro	Ser	Ser	Ser
			20					25					30		
Pro	Thr	Pro	Thr	Ser	Ser	Asn	Thr	Gln	Glu	Glu	Ala	Gln	Pro	Ser	Ser
		35					40					45			
Val	Ser	Asp	Leu	Ser	Pro	Met	Ser	Met	Pro	Phe	Ala	Ser	Asn	Ser	Glu
	50					55					60				
Pro	Ala	Pro	Leu	Thr	Leu	Thr	Ser	Pro	Arg	Met	Val	Ala	Ala	Asp	Asn
65				70					75					80	
Gln	Asp	Thr	Ser	Asn	Leu	Pro	Gln	Leu	Ala	Val	Pro	Ala	Pro	Arg	Val
			85						90				95		
Ser	His	Arg	Met	Gln	Pro	Arg	Gly	Ser	Phe	Tyr	Ser	Met	Val	Pro	Asn
		100					105					110			

Ala Thr Ile His Gln Asp Pro Gln Ser Ile Phe Val Thr Asn Pro Val  
 115 120 125  
 Thr Leu Thr Pro Pro Gln Gly Pro Pro Ala Ala Val Gln Leu Ser Ser  
 130 135 140  
 Ala Val Asn Ile Met Asn Gly Ser Gln Met His Ile Asn Pro Ala Asn  
 145 150 155 160  
 Lys Ser Leu Pro Pro Thr Phe Gly Pro Ala Thr Leu Phe Asn His Phe  
 165 170 175  
 Ser Ser Leu Phe Asp Ser Ser Gln Val Pro Ala Asn Gln Gly Trp Gly  
 180 185 190  
 Asp Gly Pro Leu Ser Ser Arg Val Ala Thr Asp Ala Ser Phe Thr Val  
 195 200 205  
 Gln Ser Ala Phe Leu Gly Asn Ser Val Leu Gly His Leu Glu Asn Met  
 210 215 220  
 His Pro Asp Asn Ser Lys Ala Pro Gly Phe Arg Pro Pro Ser Gln Arg  
 225 230 235 240  
 Val Ser Thr Ser Pro Val Gly Leu Pro Ser Ile Asp Pro Ser Gly Ser  
 245 250 255  
 Ser Pro Ser Ser Ser Ser Ala Pro Leu Ala Ser Phe Ser Gly Ile Pro  
 260 265 270  
 Gly Thr Arg Val Phe Leu Gln Gly Pro Ala Pro Val Gly Thr Pro Ser  
 275 280 285  
 Phe Asn Arg Gln His Phe Ser Pro His Pro Trp Thr Ser Ala Ser Asn  
 290 295 300  
 Ser Cys Asp Ser Pro Ile Pro Ser Val Ser Ser Gly Ser Ser Ser Pro  
 305 310 315 320  
 Leu Ser Ala Thr Ser Ala Pro Pro Thr Leu Gly Gln Pro Lys Gly Val  
 325 330 335  
 Ser Ala Ser Gln Asp Arg Lys Ile Pro Pro Pro Ile Gly Thr Glu Arg  
 340 345 350  
 Leu Ala Arg Ile Arg Gln Gly Gly Ser Val Ala Gln Ala Pro Ala Gly  
 355 360 365  
 Thr Ser Phe Val Ala Pro Val Gly His Ser Gly Ile Trp Ser Phe Gly  
 370 375 380  
 Val Asn Ala Val Ser Glu Gly Leu Ser Gly Trp Ser Gln Ser Val Met  
 385 390 395 400

Gly Asn His Pro Met His Gln Gln Leu Ser Asp Pro Ser Thr Phe Ser  
                             405                            410                            415  
 Gln His Gln Pro Met Glu Arg Asp Asp Ser Gly Met Val Ala Pro Ser  
                             420                            425                            430  
 Asn Ile Phe His Gln Pro Met Gly Leu Pro Ile Ser Met Tyr Gly Gly  
                             435                            440                            445  
 Thr Ile Ile Pro Ser His Pro Gln Leu Ala Asp Val Pro Gly Gly Pro  
                             450                            455                            460  
 Leu Phe Asn Gly Leu His Asn Pro Asp Pro Ala Trp Asn Pro Met Ile  
 465                            470                            475                            480  
 Lys Val Ile Gln Asn Ser Thr Glu Cys Thr Asp Ala Gln Gln Ala Ser  
                             485                            490                            495  
 Leu Leu Pro Ser Val Pro Ala Leu Lys Gly Glu Ile Pro Ser Pro Gln  
                             500                            505                            510  
  
 Leu Thr Arg Pro Lys Lys Arg Ile Gly Arg Pro Met Val Ala Ser Pro  
                             515                            520                            525  
 Asn Gln Arg His Gln Asp His Leu Arg Pro Lys Val Pro Ala Gly Val  
                             530                            535                            540  
 Gln Glu Leu Thr His Cys Pro Asp Thr Pro Leu Leu Pro Pro Ser Asp  
 545                            550                            555                            560  
 Ser Arg Gly His Asn Ser Ser Asn Ser Pro Ser Leu Gln Ala Gly Gly  
                             565                            570                            575  
 Ala Glu Gly Ala Gly Asp Arg Gly Arg Asp Thr Arg  
                             580                            585

<210> 3648

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3648

Met Phe Leu Ser Leu Lys Met Phe Cys Trp Gly Arg His Ala Met Val  
     1                            5                            10                            15  
 Leu Arg Ile Ala Pro Phe Ser Asp Asp Leu Leu Leu Thr Ser Asp Thr

			20						25					30		
Tyr	Arg	Asp	Ser	Ala	Gly	Ala	Cys	Gln	Ser	Ser	Asn	Thr	Ser	Arg	Asn	
		35					40					45				
Val	Arg	Ile	Trp	Asp	Arg	Arg	Ser	Gln	Asp	Ile	His	Leu	Ala	Leu	Phe	
	50					55					60					
Trp	Glu	Glu	Glu	Ile	His	Phe	Leu	Ala	Cys	Ala	Gly	Trp	Leu	Thr	Pro	
65					70					75					80	
Val	Ile	Pro	Gly	Arg	Trp	Asp	Tyr	Gly	Cys	Glu	Pro	Pro	His	Pro	Ala	
				85					90					95		
Cys	Phe	Thr	Ser	Phe	Asn	Ser	Val	Thr	Val	Asp	Asp	Val	Pro	His	Arg	
			100						105				110			
Pro	Ala	Ser	His	Ala	Thr	Cys	Glu	Ser								
			115					120								

&lt;210&gt; 3649

&lt;211&gt; 269

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3649

Met	Val	Ala	Glu	Glu	Gly	Ser	Arg	Cys	Leu	Tyr	Pro	Gly	Gln	Leu	Phe
1				5					10					15	
Leu	Leu	Leu	His	Phe	Pro	Val	Val	Gly	Gln	Cys	Trp	His	Cys	Glu	Arg
			20					25					30		
Cys	Glu	Gly	Tyr	Asn	Tyr	Gln	Val	Asp	Glu	Leu	Ser	Cys	Glu	Leu	Cys
		35					40					45			
Pro	Leu	Asp	Gln	Arg	Pro	Asn	Met	Asn	Arg	Thr	Gly	Cys	Gln	Leu	Ile
	50					55					60				
Pro	Ile	Ile	Lys	Leu	Glu	Trp	His	Ser	Pro	Trp	Ala	Val	Val	Pro	Val
65					70					75				80	
Phe	Val	Ala	Ile	Leu	Gly	Ile	Ile	Ala	Thr	Thr	Phe	Val	Ile	Val	Thr
			85						90				95		
Phe	Val	Arg	Tyr	Asn	Asp	Thr	Pro	Ile	Val	Arg	Ala	Ser	Gly	Arg	Glu
		100						105				110			
Leu	Ser	Tyr	Val	Leu	Leu	Thr	Gly	Ile	Phe	Leu	Cys	Tyr	Ser	Ile	Thr

115	120	125
Phe Leu Met Ile Ala Ala Pro Asp Thr Ile Ile Cys Ser Phe Arg Arg		
130	135	140
Val Phe Leu Gly Leu Gly Met Cys Phe Ser Tyr Ala Ala Leu Leu Thr		
145	150	155
Lys Thr Asn Arg Ile His Arg Ile Phe Glu Gln Gly Lys Lys Ser Val		
165	170	175
Thr Ala Pro Lys Phe Ile Ser Pro Ala Ser Gln Leu Val Ile Thr Phe		
180	185	190
Ser Leu Ile Ser Val Gln Leu Leu Gly Val Phe Val Trp Phe Val Val		
195	200	205
Asp Pro Pro His Ile Ile Ile Asp Tyr Gly Glu Gln Arg Thr Leu Asp		
210	215	220
Pro Glu Lys Ala Arg Gly Val Leu Lys Cys Asp Ile Ser Asp Leu Ser		
225	230	235
Leu Ile Cys Ser Leu Gly Tyr Ser Ile Leu Leu Met Val Thr Cys Thr		
245	250	255
Val Tyr Ala Ile Lys Thr Arg Gly Val Pro Glu Thr Phe		
260	265	

&lt;210&gt; 3650

&lt;211&gt; 540

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3650

Met Arg Ala Leu Asp Asp Met Asp His Glu Gly Arg Asp Thr Leu Ala
1 5 10 15
Arg Glu Glu Leu Arg Gln Gly Leu Ser Glu Leu Pro Ala Ile His Asp
20 25 30
Leu His Gln Gly Ile Leu Glu Glu Leu Glu Glu Arg Leu Ser Asn Trp
35 40 45
Glu Ser Gln Gln Lys Val Ala Asp Val Phe Leu Ala Arg Glu Gln Gly
50 55 60
Phe Asp His His Ala Thr His Ile Leu Gln Phe Asp Arg Tyr Leu Gly

65	70	75	80
Leu Leu Ser Glu Asn Cys Leu His Ser Pro Arg Leu Ala Ala Ala Val			
	85	90	95
Arg Glu Phe Glu Gln Ser Val Gln Gly Gly Ser Gln Thr Ala Lys His			
	100	105	110
Arg Leu Leu Arg Val Val Gln Arg Leu Phe Gln Tyr Gln Val Leu Leu			
	115	120	125
Thr Asp Tyr Leu Asn Asn Leu Cys Pro Asp Ser Ala Glu Tyr Asp Asn			
	130	135	140
Thr Gln Gly Ala Leu Ser Leu Ile Ser Lys Val Thr Asp Arg Ala Asn			
145	150	155	160
Asp Ser Met Glu Gln Gly Glu Asn Leu Gln Lys Leu Val His Ile Glu			
	165	170	175
His Ser Val Arg Gly Gln Gly Asp Leu Leu Gln Pro Gly Arg Glu Phe			
	180	185	190
Leu Lys Glu Gly Thr Leu Met Lys Val Thr Gly Lys Asn Arg Arg Pro			
	195	200	205
Arg His Leu Phe Leu Met Asn Asp Val Leu Leu Tyr Thr Tyr Pro Gln			
	210	215	220
Lys Asp Gly Lys Tyr Arg Leu Lys Asn Thr Leu Ala Val Ala Asn Met			
225	230	235	240
Lys Val Ser Arg Pro Val Met Glu Lys Val Pro Tyr Ala Leu Lys Ile			
	245	250	255
Glu Thr Ser Glu Ser Cys Leu Met Leu Ser Ala Ser Ser Cys Ala Glu			
	260	265	270
Arg Asp Glu Trp Tyr Gly Cys Leu Ser Arg Ala Leu Pro Glu Asp Tyr			
	275	280	285
Lys Ala Gln Ala Leu Ala Ala Phe His His Ser Val Glu Ile Arg Glu			
	290	295	300
Arg Leu Gly Val Ser Leu Gly Glu Arg Pro Pro Thr Leu Val Pro Val			
305	310	315	320
Thr His Val Met Met Cys Met Asn Cys Gly Cys Asp Phe Ser Leu Thr			
	325	330	335
Leu Arg Arg His His Cys His Ala Cys Gly Lys Ile Val Cys Arg Asn			
	340	345	350
Cys Ser Arg Asn Lys Tyr Pro Leu Lys Tyr Leu Lys Asp Arg Met Ala			



355	360	365
Lys Val Cys Asp Gly Cys Phe Gly Glu Leu Lys Lys Arg Gly Arg Ala		
370	375	380
Val Pro Gly Leu Met Arg Glu Arg Pro Val Ser Met Ser Phe Pro Leu		
385	390	395
Ser Ser Pro Arg Phe Ser Gly Ser Ala Phe Ser Ser Val Phe Gln Ser		
405	410	415
Ile Asn Pro Ser Thr Phe Lys Lys Gln Lys Lys Val Pro Ser Ala Leu		
420	425	430
Thr Glu Val Ala Ala Ser Gly Glu Gly Ser Ala Ile Ser Gly Tyr Leu		
435	440	445
Ser Arg Cys Lys Arg Gly Lys Arg His Trp Lys Lys Leu Trp Phe Val		
450	455	460
Ile Lys Gly Lys Val Leu Tyr Thr Tyr Met Ala Ser Glu Asp Lys Val		
465	470	475
Ala Leu Glu Ser Met Pro Leu Leu Gly Phe Thr Ile Ala Pro Glu Lys		
485	490	495
Glu Glu Gly Ser Ser Glu Val Gly Pro Ile Phe His Leu Tyr His Lys		
500	505	510
Lys Thr Leu Phe Tyr Ser Phe Lys Ala Glu Asp Thr Asn Ser Ala Gln		
515	520	525
Arg Trp Ile Glu Ala Met Glu Asp Ala Ser Val Leu		
530	535	540

&lt;210&gt; 3651

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3651

Met Pro Arg Gly Phe His Asn Asn Asn Ile Lys Ala Ile Pro Glu Lys
1 5 10 15
Ala Phe Met Gly Asn Pro Leu Leu Gln Thr Ile His Phe Tyr Asp Asn
20 25 30
Pro Ile Gln Phe Val Gly Arg Ser Ala Phe Gln Tyr Leu Pro Lys Leu

35	40	45
His Thr Leu Ser Leu Asn Gly Ala Met Asp Ile Gln Glu Phe Pro Asp		
50	55	60
Leu Lys Gly Thr Thr Ser Leu Glu Ile Leu Thr Leu Thr Arg Ala Gly		
65	70	75
Ile Arg Leu Leu Pro Ser Gly Met Cys Gln Gln Leu Pro Arg Leu Arg		
85	90	95
Val Leu Glu Leu Ser His Asn Gln Ile Glu Glu Leu Pro Ser Leu His		
100	105	110
Arg Cys Gln Lys Leu Glu Glu Ile Gly Leu Gln His Asn Arg Ile Trp		
115	120	125
Glu Ile Gly Ala Asp Thr Phe Ser Gln Leu Ser Ser Cys Asp Ser Thr		
130	135	140
Gln Ala Leu Val Ala Phe Ser Asp Val Asp Leu Ile Leu Glu Ala Ser		
145	150	155
Glu Ala Gly Arg Pro Pro Gly Leu Glu Thr Tyr Gly Phe Pro Ser Val		
165	170	175
Thr Leu Ile Ser Cys Gln Gln Pro Gly Ala Pro Arg Leu Glu Gly Ser		
180	185	190
His Cys Val Glu Pro Glu Gly Asn His Phe Gly Asn Pro Gln Pro Ser		
195	200	205
Met Asp Gly Glu Leu Leu Leu Arg Ala Glu Gly Ser Thr Pro Ala Gly		
210	215	220
Gly Gly Leu Ser Gly Gly Gly Gly Phe Gln Pro Ser Gly Leu Ala Phe		
225	230	235
Ala Ser His Val		240

&lt;210&gt; 3652

&lt;211&gt; 477

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3652

Met Ala His Asn Pro Asn Met Thr His Leu Lys Ile Asn Leu Pro Val

1	5	10	15
Thr Ala Leu Pro Pro Leu Trp Val Arg Cys Asp Ser Ser Asp Pro Glu			
20	25	30	
Gly Thr Cys Trp Leu Gly Ala Glu Leu Ile Thr Thr Asn Asn Ser Ile			
35	40	45	
Thr Gly Ile Val Leu Tyr Val Val Ser Cys Lys Ala Asp Lys Asn Tyr			
50	55	60	
Ser Val Asn Leu Glu Asn Leu Lys Asn Leu His Lys Lys Arg His His			
65	70	75	80
Leu Ser Thr Val Thr Ser Lys Gly Phe Ala Gln Tyr Glu Leu Phe Lys			
85	90	95	
Ser Ser Ala Leu Asp Asp Thr Ile Thr Ala Ser Gln Thr Ala Ile Ala			
100	105	110	
Leu Asp Ile Ser Trp Ser Pro Val Asp Glu Ile Leu Gln Ile Pro Pro			
115	120	125	
Leu Ser Ser Thr Ala Thr Leu Asn Ile Lys Val Glu Ser Gly Glu Pro			
130	135	140	
Arg Gly Pro Leu Asn His Leu Tyr Arg Glu Leu Lys Phe Leu Leu Val			
145	150	155	160
Leu Ala Asp Gly Leu Arg Thr Gly Val Thr Glu Trp Leu Glu Pro Leu			
165	170	175	
Glu Ala Lys Ser Ala Val Glu Leu Val Gln Glu Phe Leu Asn Asp Leu			
180	185	190	
Asn Lys Leu Asp Gly Phe Gly Asp Ser Thr Lys Lys Asp Thr Glu Val			
195	200	205	
Glu Thr Leu Lys His Asp Thr Ala Ala Val Asp Arg Ser Val Lys Arg			
210	215	220	
Leu Phe Lys Val Arg Ser Asp Leu Asp Phe Ala Glu Gln Leu Trp Cys			
225	230	235	240
Lys Met Ser Ser Ser Val Ile Ser Tyr Gln Asp Leu Val Lys Cys Phe			
245	250	255	
Thr Leu Ile Ile Gln Ser Leu Gln Arg Gly Asp Ile Gln Pro Trp Leu			
260	265	270	
His Ser Gly Ser Asn Ser Leu Leu Ser Lys Leu Ile His Gln Ser Tyr			
275	280	285	
His Gly Thr Met Asp Thr Val Ser Leu Ser Gly Thr Ile Pro Val Gln			

290	295	300	
Met Leu Leu Glu Ile Gly Leu Asp Lys Leu Lys Lys Asp Tyr Ile Ser			
305	310	315	320
Phe Phe Ile Gly Gln Glu Leu Ala Ser Leu Asn His Leu Glu Tyr Phe			
	325	330	335
Ile Ala Pro Ser Val Asp Ile Gln Glu Gln Val Tyr Arg Val Gln Lys			
	340	345	350
Leu His His Ile Leu Glu Ile Leu Val Ser Cys Met Pro Phe Ile Lys			
	355	360	365
Ser Gln His Glu Leu Leu Phe Ser Leu Thr Gln Ile Cys Ile Lys Tyr			
	370	375	380
Tyr Lys Gln Asn Pro Leu Asp Glu Gln His Ile Phe Gln Leu Pro Val			
385	390	395	400
Arg Pro Thr Ala Val Lys Asn Leu Tyr Gln Ser Glu Lys Pro Gln Lys			
	405	410	415
Trp Arg Val Glu Ile Tyr Ser Gly Gln Lys Lys Ile Lys Thr Val Trp			
	420	425	430
Gln Leu Ser Asp Ser Ser Pro Ile Asp His Leu Asn Phe His Lys Pro			
	435	440	445
Asp Phe Ser Glu Leu Thr Leu Asn Gly Ser Leu Glu Glu Arg Ile Phe			
	450	455	460
Phe Thr Asn Met Val Thr Cys Ser Gln Val His Phe Lys			
465	470	475	

&lt;210&gt; 3653

&lt;211&gt; 486

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3653

Met Leu Gly Glu Gly Ile Lys Glu Arg Gln Arg Arg Ile Lys Glu Phe			
1	5	10	15
Gln Glu Lys Ile Asp Lys Val Glu Asp Asp Ile Phe Gln His Phe Cys			
	20	25	30
Glu Glu Ile Gly Val Glu Asn Ile Arg Glu Phe Glu Asn Lys His Val			

35	40	45
Lys Arg Gln Gln Glu Ile Asp Gln Lys Arg Leu Glu Phe Glu Lys Gln		
50	55	60
Lys Thr Arg Leu Asn Val Gln Leu Glu Tyr Ser Arg Ser His Leu Lys		
65	70	75
Lys Lys Leu Asn Lys Ile Asn Thr Leu Lys Glu Thr Ile Gln Lys Gly		
85	90	95
Ser Glu Asp Ile Asp His Leu Lys Lys Ala Glu Glu Asn Cys Leu Gln		
100	105	110
Thr Val Asn Glu Leu Met Ala Lys Gln Gln Gln Leu Lys Asp Ile Arg		
115	120	125
Val Thr Gln Asn Ser Ser Ala Glu Lys Val Gln Thr Gln Ile Glu Glu		
130	135	140
Glu Arg Lys Lys Phe Leu Ala Val Asp Arg Glu Val Gly Lys Leu Gln		
145	150	155
Lys Glu Val Val Ser Ile Gln Thr Ser Leu Glu Gln Lys Arg Leu Glu		
165	170	175
Lys His Asn Leu Leu Leu Asp Cys Lys Val Gln Asp Ile Glu Ile Ile		
180	185	190
Leu Leu Ser Gly Ser Leu Asp Asp Ile Ile Glu Val Glu Met Gly Thr		
195	200	205
Glu Ala Glu Ser Thr Gln Ala Thr Ile Asp Ile Tyr Glu Lys Glu Glu		
210	215	220
Ala Phe Glu Ile Asp Tyr Ser Ser Leu Lys Glu Asp Leu Lys Ala Leu		
225	230	235
Gln Ser Asp Gln Glu Ile Glu Ala His Leu Arg Leu Leu Leu Gln Gln		
245	250	255
Val Ala Ser Gln Glu Asp Ile Leu Leu Lys Thr Ala Ala Pro Asn Leu		
260	265	270
Arg Ala Leu Glu Asn Leu Lys Thr Val Arg Asp Lys Phe Gln Glu Ser		
275	280	285
Thr Asp Ala Phe Glu Ala Ser Arg Lys Glu Ala Arg Met Cys Arg Gln		
290	295	300
Glu Phe Glu Gln Val Lys Lys Arg Arg Tyr Asp Leu Phe Thr Gln Cys		
305	310	315
Phe Glu His Val Ser Ile Ser Ile Asp Gln Ile Tyr Lys Lys Leu Cys		

325 330 335  
 Arg Asn Asn Ser Ala Gln Ala Phe Leu Ser Pro Glu Asn Pro Glu Glu  
 340 345 350  
 Pro Tyr Leu Glu Gly Ile Ser Tyr Asn Cys Val Ala Pro Gly Lys Arg  
 355 360 365  
 Phe Met Pro Met Asp Asn Leu Ser Gly Gly Glu Lys Cys Val Ala Ala  
 370 375 380  
 Leu Ala Leu Leu Phe Ala Val His Ser Phe Arg Pro Ala Pro Phe Phe  
 385 390 395 400  
 Val Leu Asp Glu Val Asp Ala Ala Leu Asp Asn Thr Asn Ile Gly Lys  
 405 410 415  
 Val Ser Ser Tyr Ile Lys Glu Gln Thr Gln Asp Gln Phe Gln Met Ile  
 420 425 430  
 Val Ile Ser Leu Lys Glu Glu Phe Tyr Ser Arg Ala Asp Ala Leu Ile  
 435 440 445  
 Gly Ile Tyr Pro Glu Tyr Asp Asp Cys Met Phe Ser Arg Val Leu Thr  
 450 455 460  
 Leu Asp Leu Ser Gln Tyr Pro Asp Thr Glu Gly Gln Glu Ser Ser Lys  
 465 470 475 480  
 Arg His Gly Glu Ser Arg  
 485

<210> 3654

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3654

Met Gly Asn His Glu Leu Met Thr Ser Trp Leu Leu Asp Val Arg Lys  
 1 5 10 15  
 Asn Leu Gln Ser Gln Arg Glu Leu Ser Lys Phe Cys Pro Glu Gln Thr  
 20 25 30  
 Glu Gly Trp Arg Cys His Arg Leu Arg Trp Glu Asn Gly Arg Cys His  
 35 40 45  
 Arg Leu Gln Gly Lys Val Gly Asp Gln Leu Arg Ala Pro Glu Pro Ser

50                      55                      60  
 Trp Lys Glu Phe Pro Ile Gln Pro Ala Ser Val Ser Ala Ser Val Leu  
 65                      70                      75                      80  
 Phe Leu Met Thr Leu Arg Val Leu Ala Ser Gly Ser Phe Met Met Gln  
                     85                      90                      95  
 Arg Val Pro Pro Ser His Pro Gly Arg Leu Arg Ala Pro Ala Ser Ser  
                     100                      105                      110  
 Trp Gln Pro Gly Ala Arg Leu Arg Ile Trp Arg Pro Thr Thr Gly Trp  
                     115                      120                      125  
 Ser Leu Ala Ala Thr Ser Gln Arg Arg Val Ser Ser Pro Val Val Ser  
                     130                      135                      140  
 Cys Gly Arg Val Ala Val Thr Arg Ser Arg Thr Arg Asp Ser Trp Pro  
 145                      150                      155                      160  
 Trp Cys Pro Ser Arg Ser Pro Arg Cys Val Ala Cys Arg Leu Phe Phe  
                     165                      170                      175

<210> 3655

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3655

Met Arg Gly His Lys Gly Ala Lys Gly Glu Ile Gly Glu Pro Gly Arg  
 1                      5                      10                      15  
 Gln Gly His Lys Gly Glu Glu Gly Asp Gln Gly Glu Leu Gly Glu Val  
                     20                      25                      30  
 Gly Ala Gln Gly Pro Pro Gly Ala Gln Gly Leu Arg Gly Ile Thr Gly  
                     35                      40                      45  
 Ile Val Gly Asp Lys Gly Glu Lys Gly Ala Arg Gly Leu Asp Gly Glu  
                     50                      55                      60  
 Pro Gly Pro Gln Gly Leu Pro Gly Ala Pro Gly Asp Gln Gly Gln Arg  
 65                      70                      75                      80  
 Gly Pro Pro Gly Glu Ala Gly Pro Lys Gly Asp Arg Gly Ala Glu Gly  
                     85                      90                      95  
 Ala Arg Gly Ile Pro Gly Leu Pro Gly Pro Lys Gly Asp Thr Gly Leu

100	105	110	
Pro Gly Val Asp Gly Arg Asp Gly Ile Pro Gly Met Pro Gly Thr Lys			
115	120	125	
Gly Glu Pro Gly Lys Pro Gly Pro Pro Gly Asp Ala Gly Leu Gln Gly			
130	135	140	
Leu Pro Gly Val Pro Gly Ile Pro Gly Ala Lys Gly Val Ala Gly Glu			
145	150	155	160
Lys Gly Ser Thr Gly Ala Pro Gly Lys Pro Gly Gln Met Gly Asn Ser			
165	170	175	
Gly Lys Pro Gly Gln Gln Gly Pro Pro Gly Glu Val Gly Pro Arg Gly			
180	185	190	
Pro Gln Gly Leu Pro Gly Ser Arg Gly Glu Leu Gly Pro Val Gly Ser			
195	200	205	
Pro Gly Leu Pro Gly Lys Leu Gly Val Val Gly Glu Pro Gly Pro Lys			
210	215	220	
Gly Glu Gln Gly Ala Ser Gly Glu Glu Gly Glu Ala Gly Glu Arg Gly			
225	230	235	240
Glu Leu Gly Asp Ile Gly Leu Pro Gly Pro Lys Gly Ser Ala Gly Asn			
245	250	255	
Pro Gly Glu Pro Gly Leu Arg Gly Pro Glu Gly Ser Arg Gly Leu Pro			
260	265	270	
Gly Val Glu Gly Pro Arg Gly Pro Pro Gly Pro Arg Gly Val Gln Gly			
275	280	285	
Glu Gln Gly Ala Thr Gly Leu Pro Gly Val Gln Gly Pro Pro Gly Arg			
290	295	300	
Ala Pro Thr Asp Gln His Ile Lys Gln Val Cys Met Arg Val Ile Gln			
305	310	315	320
Glu His Phe Ala Glu Met Ala Ala Ser Leu Lys Arg Pro Asp Ser Gly			
325	330	335	
Ala Thr Gly Leu Pro Gly Arg Pro Gly Pro Pro Gly Pro Pro Gly Pro			
340	345	350	
Pro Gly Glu Asn Gly Phe Pro Gly Gln Met Gly Ile Arg Gly Leu Pro			
355	360	365	
Gly Ile Lys Gly Pro Pro Gly Ala Leu Gly Leu Arg Gly Pro Lys Gly			
370	375	380	
Asp Leu Gly Glu Lys Gly Glu Arg Gly Pro Pro Gly Arg Gly Pro Asn			



385                    390                    395                    400  
 Gly Leu Pro Gly Ala Ile Gly Leu Pro Gly Asp Pro Gly Pro Ala Ser  
                     405                    410                    415  
 Tyr Gly Arg Asn Gly Arg Asp Gly Glu Arg Gly Pro Pro Gly Val Ala  
                     420                    425                    430  
 Gly Ile Pro Gly Val Pro Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly  
                     435                    440                    445  
 Phe Cys Glu Pro Ala Ser Cys Thr Met Gln Ala Gly Gln Arg Ala Phe  
                     450                    455                    460  
 Asn Lys Gly Pro Asp Pro  
 465                    470

<210> 3656

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3656

Met His Glu Pro Leu Cys Pro Ala Ser Cys Cys Phe Tyr Thr Phe Ser  
   1                    5                    10                    15  
 Ile Ala Ile Thr Val Phe Asp Gly Ser Phe Cys Phe Phe Glu Phe Leu  
                     20                    25                    30  
 Ile Phe Ile Thr Pro Ala Ser Ser Ala Thr Leu Lys Asp Leu Glu Ser  
                     35                    40                    45  
 Ser Ser Arg Cys Glu Ala Val Leu Lys Arg Gln Leu Trp Gln Ser Ile  
                     50                    55                    60  
 Lys Ala Arg Ala Gln Leu Glu Ala His Val Thr Gln Met Leu Glu Gln  
                     65                    70                    75                    80  
 Val Gln Leu Glu Thr Asp Glu Tyr Thr Gln His Leu Lys Gly Glu Arg  
                     85                    90                    95  
 Ala Arg Trp Gln Gln Arg Val Trp Lys Met Ser Glu Glu Val Cys Thr  
                     100                    105                    110  
 Trp Lys Glu Glu Lys Lys His Asp Arg His Arg Val Gln Glu Leu Glu  
                     115                    120                    125  
 Arg Ser Leu Ala Glu Leu Lys Asn

130

135

&lt;210&gt; 3657

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3657

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Met Leu Lys Val Ser Ile Trp Ser Ala Phe Gly Pro Met Leu Asn Leu
  1             5             10             15
Phe Asn Ser Ile Leu Tyr Arg Ser Asn Ile Val Pro Glu Ser Ala Glu
      20             25             30
Ala Ala Arg Lys Glu Val Ser Ser Arg Thr Lys Leu His Ile Phe Leu
      35             40             45
Gly Arg Ser Ala Ser Leu Leu Arg Pro Asn Gly His Ser Leu Ala Arg
      50             55             60
Trp Leu Glu Thr Thr Val Leu Glu Arg Thr Gln Gly Lys Ile Ser Arg
      65             70             75             80
Arg Asn Pro Asn Arg Lys Ile Tyr Phe Ile His Phe Leu Gln Lys Met
      85             90             95
His Pro Ile Ile Ala Tyr Ser Pro Pro Thr Trp Thr Ala His Ser Val
      100            105            110
Asn His Val Leu Gln Val Arg Phe Gly Tyr
      115            120

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&lt;210&gt; 3658

&lt;211&gt; 135

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3658

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Met Lys Pro His Ala Glu Gln Ile Gln Leu Leu Gly Lys Gln Gly Ala
  1             5             10             15

```

Ala Val Ser Gln Leu Cys Pro Leu Val Leu Val Ser Gly His Ile Cys  
                   20                                  25                                  30  
 Arg Glu Glu Arg Arg His Phe Gln Arg Ile Ala Leu Thr Ala Ser Ser  
                   35                                  40                                  45  
 Leu Ser Cys Gly Ser Gln Leu Lys Trp His Leu Leu Gln Glu Ala Phe  
                   50                                  55                                  60  
 Pro Asp Phe Leu Pro Phe Ser Val Leu Pro Val Ser Trp Thr Ala Arg  
                   65                                  70                                  75                                  80  
 Ala Thr Asp Val Leu Ala Leu Ser Val Asp Met Ala Cys Ser Leu Leu  
                                   85                                  90                                  95  
 Pro His Trp Thr Gly His Ser Ala Arg Ala Lys Thr Val Phe Gly Pro  
                                   100                                  105                                  110  
 Ser Leu Trp Leu Gln Leu Cys Leu Ala Gln Val Gln Ala Gln Tyr Gly  
                                   115                                  120                                  125  
 Cys Ser Leu Met Phe Ala Glu  
                   130                                  135

<210> 3659

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3659

Met Ser His Arg Ala Trp Leu Ile Leu Ala Phe Phe Phe Ile Phe Tyr  
           1                                  5                                  10                                  15  
 Tyr Phe Phe Lys Ile Glu Ser Cys Ser Val Ala Gln Ala Gly Val Gln  
                   20                                  25                                  30  
 Trp His Ser Leu Ser Ser Val Gln Pro Pro Pro Pro Arg Phe Lys Gln  
                   35                                  40                                  45  
 Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Asn Arg His Met Pro  
                   50                                  55                                  60  
 Pro Arg Leu Arg Leu Ile Val Gly Gly Arg Ala Cys Ile Ile Val Pro  
                   65                                  70                                  75                                  80  
 Leu His Ser Ser Leu Gly Asn Arg Ala Arg Leu Cys Leu Pro Asn Lys  
                                   85                                  90                                  95

Ala Glu Lys Asp Tyr Leu Arg Glu

100

<210> 3660

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3660

Met Ser Lys Lys His Gln Asn Asp Cys Thr Cys Asp Arg Ser Cys Lys

1

5

10

15

Asn Asn Ala Thr Lys Gly Phe Pro Thr Thr Ser Arg Met Gln Thr Arg

20

25

30

Lys Phe Gly Pro Lys Ala Leu Leu Phe Leu Tyr Val Arg Met Pro Asn

35

40

45

Ser Leu Ala Gly Lys Arg Pro Ile Met Gln Ile Lys Tyr Thr Ser Asn

50

55

60

Phe Ser Pro Glu Lys Gln Leu Trp Leu Gln Val Leu Leu Lys Gln Ala

65

70

75

80

Leu Gln Gln Arg Cys Tyr Ser Leu Ala Leu Arg Arg Asn Lys Asn Ser

85

90

95

Pro Ser Glu Val Tyr Glu Arg Val Arg Asn Cys Glu

100

105

<210> 3661

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3661

Met Ser Pro Leu Pro Ser Thr Leu Pro Gln Gly Thr Ser Cys Pro Ala

1

5

10

15

Leu Pro Leu Leu Leu Pro Gly Arg Pro Cys Ala Ala Ala Leu Phe Val

20

25

30

Arg His Pro Phe Pro Gly Val Pro Leu Ser Phe Pro Leu Thr Leu Leu  
           35                          40                          45  
 Ile Ala Leu Leu Ser Ser Pro Leu Tyr Ser Ser Pro His Ser Leu Ser  
           50                          55                          60  
 Ser His Pro Gln Pro Asp Leu Thr Ala Cys Lys Ser His Pro Gly Glu  
           65                          70                          75                          80  
 Met Val Ser Leu Leu Leu Gly Gln Phe Pro Gly Gly Pro Glu Leu Pro  
                           85                          90                          95  
 Gly Leu Val Asp Ser Gln Gln Arg Pro Gly Arg His Gly Glu Ser Lys  
                           100                          105                          110  
 Thr Met Ala Ser Glu His Ser Ala Trp Pro Ala Pro Phe Leu Ser Cys  
                           115                          120                          125  
 Leu Gly Ser Gln Thr Ala Gln Ala Ser Ala Phe Glu Leu Ala Ser Pro  
                           130                          135                          140  
 Trp Asn Leu Val Cys Asn His Gly Ala Asn Cys Arg Thr Arg Gly Arg  
           145                          150                          155                          160  
  
 Glu Gly Arg Gly Val Lys Ser Ile Glu Ser Val Leu Lys Glu Gly Gly  
                           165                          170                          175  
 Asp Trp Thr Thr  
                           180

<210> 3662

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3662

Met Arg Ala Pro Ala Gln Val Arg Thr Leu Arg Trp Ser Leu Gly Trp  
           1                          5                          10                          15  
 Pro Gly Ser Arg Gly Arg Asp Val Phe Ala Ala Leu Arg Cys Ala Gln  
                           20                          25                          30  
 Ala Leu Arg Cys Gln Pro Leu Gly Ser Ala Leu Pro Pro Gln Ala Pro  
                           35                          40                          45  
 Thr Arg Asp Leu Gly Arg Pro Gln Ala Phe Asp Ser Ser Arg Thr Pro

50                      55                      60  
 Gly Pro Arg Pro Pro Arg Ser Thr Leu Arg Met Met Glu Thr Lys Ser  
 65                      70                      75                      80  
 Pro Thr Ser Pro Ser Tyr Gly Ala Arg Gly Lys Val Pro Pro Gly Ala  
                     85                      90                      95  
 Gly Pro Gly Ser Pro Leu Ser Arg Gly Ala Gly Gln Gly Ala Pro Leu  
                     100                      105                      110  
 Ser Glu Thr Arg Phe His His Val Ala Gln Ala Phe Leu Lys Leu Leu  
                     115                      120                      125  
 Ser Ser Ser Asn Pro Pro Thr Ser Ala Ser Glu Ser Ala Arg Ile Ile  
                     130                      135                      140  
 Gly Val Ser His Cys Thr Gln Pro Gln Val Ala Ser Leu Ser Asp Arg  
 145                      150                      155                      160  
  
 His Cys Ser Lys Val Asn His Thr Val Leu Ser Pro Arg Lys Gly Val  
                     165                      170                      175  
 Pro Leu Gln Leu Thr Ala Ala His Ser Ser Ser Gln Glu Val Leu Ala  
                     180                      185                      190  
 Thr Val Pro Phe His Gly  
                     195

<210> 3663

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3663

Met Lys Glu Pro Leu Leu Gly Gly Glu Cys Asp Lys Ala Val Ala Ser  
 1                      5                      10                      15  
  
 Gln Leu Gly Leu Leu Asp Glu Ile Lys Thr Glu Pro Asp Asn Ala Gln  
                     20                      25                      30  
 Glu Tyr Cys His Arg Gln Gln Ser Arg Thr Gln Glu Asn Glu Leu Lys  
                     35                      40                      45  
 Ile Asn Ala Val Phe Ser Glu Ser Ala Ser Gln Leu Thr Ala Gly Ile

50	55	60
Gln Leu Ser Leu Ala Ser Ser Gly Val Asn Lys Met Leu Pro Ser Val		
65	70	75
Ser Thr Thr Ala Ile Gln Val Ser Cys Ala Gly Cys Lys Lys Ile Leu		
85	90	95
Gln Lys Gly Gln Thr Ala Tyr Gln Arg Lys Gly Ser Ala Gln Leu Phe		
100	105	110
Cys Ser Ile Pro Cys Ile Thr Glu Tyr Ile Ser Ser Ala Ser Ser Pro		
115	120	125
Val Pro Ser Lys Arg Thr Cys Ser Asn Cys Ser Lys Asp Ile Leu Asn		
130	135	140
Pro Lys Asp Val Ile Ser Val Gln Leu Glu Asp Thr Thr Ser Cys Lys		
145	150	155
Thr Phe Cys Ser Leu Ser Cys Leu Ser Ser Tyr Glu Glu Lys Arg Lys		
165	170	175
Pro Phe Val Thr Ile Cys Thr Asn Ser Ile Leu Thr Lys Cys Ser Met		
180	185	190
Cys Gln Lys Thr Ala Ile Ile Gln Tyr Glu Val Lys Tyr Gln Asn Val		
195	200	205
Lys His Asn Leu Cys Ser Asn Ala Cys Leu Ser Lys Phe His Ser Ala		
210	215	220
Asn Asn Phe Ile Met Asn Cys Cys Glu Asn Cys Gly Thr Tyr Cys Tyr		
225	230	235
Thr Ser Ser Ser Leu Ser His Ile Leu Gln Met Glu Gly Gln Ser His		
245	250	255
Tyr Phe Asn Ser Ser Lys Ser Ile Thr Ala Tyr Lys Gln Lys Pro Ala		
260	265	270
Lys Pro Leu Ile Ser Val Pro Cys Lys Pro Leu Lys Pro Ser Asp Glu		
275	280	285
Met Ile Glu Thr Thr Ser Asp Leu Gly Lys Thr Glu Leu Phe Cys Ser		
290	295	300
Ile Asn Cys Phe Ser Ala Tyr Ser Lys Ala Lys Met Glu Ser Ser Ser		
305	310	315
Val Ser Val Val Ser Val Val His Asp Thr Ser Thr Glu Leu Leu Ser		
325	330	335
Pro Lys Lys Asp Thr Thr Pro Val Ile Ser Asn Ile Val Ser Leu Ala		

340	345	350
Asp Thr Asp Val Ala Leu Pro Ile Met Asn Thr Asp Val Leu Gln Asp		
355	360	365
Thr Val Ser Ser Val Thr Ala Thr Ala Asp Val Ile Val Asp Leu Ser		
370	375	380
Lys Ser Ser Pro Ser Glu Pro Ser Asn Ala Val Ala Ser Ser Ser Thr		
385	390	395
Glu Gln Pro Ser Val Ser Pro Ser Ser Ser Val Phe Ser Gln His Ala		
405	410	415
Ile Gly Ser Ser Thr Glu Val Gln Lys Asp Asn Met Lys Ser Met Lys		
420	425	430
Ile Ser Asp Glu Leu Cys His Pro Lys Cys Thr Ser Lys Val Gln Lys		
435	440	445
Val Lys Gly Lys Ser Arg Ser Ile Lys Lys Ser Cys Cys		
450	455	460

&lt;210&gt; 3664

&lt;211&gt; 110

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3664

Met Phe Thr Trp Pro Ile Ser Arg Pro Arg Val Pro Leu Thr Arg Gly		
1	5	10
Phe Phe Phe Phe Leu Phe Leu Phe Phe Phe Phe Leu Gln Gly Gly Ile		
20	25	30
Met Gly Leu Trp Phe Phe Ser Pro Pro Thr Gly Arg Gly Ser Val Tyr		
35	40	45
Val Ala Cys Gly Asn Arg Ile Gly Gly Asn Glu Leu Arg Phe Pro Arg		
50	55	60
Val Gly Lys Arg Glu Val Lys Ser Gly Ala Thr Pro Pro Val Leu Trp		
65	70	75
Arg Asn Ser Pro Asn Thr Glu Lys Lys Gly Ala Val Gly Val Leu Leu		
85	90	95
Cys Leu Gln Val Arg Val Val Ser Ala Thr Gly Ala Arg His		



100

105

110

&lt;210&gt; 3665

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3665

```

Met Ala Ser Pro Gln Gly Gly Gln Ile Ala Ile Ala Met Arg Leu Arg
  1              5              10              15
Asn Gln Leu Gln Ser Val Tyr Lys Met Asp Pro Leu Arg Asn Glu Glu
      20              25              30
Glu Val Arg Val Lys Ile Lys Asp Leu Asn Glu His Ile Val Cys Cys
      35              40              45
Leu Cys Ala Gly Tyr Phe Val Asp Ala Thr Thr Ile Thr Glu Cys Leu
      50              55              60
His Thr Phe Cys Lys Ser Cys Ile Val Lys Tyr Leu Gln Thr Ser Lys
      65              70              75              80
Tyr Cys Pro Met Cys Asn Ile Lys Ile His Glu Thr Gln Pro Leu Leu
      85              90              95
Asn Leu Lys Leu Asp Arg Val Met Gln Asp Ile Val Tyr Lys Leu Val
      100             105             110
Pro Gly Leu Gln Asp Ser Glu Glu Lys Arg Ile Arg Glu Phe Tyr Gln
      115             120             125
Ser Arg Gly Leu Asp Arg Val Thr Gln Pro Thr Gly Glu Glu Pro Ala
      130             135             140
Leu Ser Asn Leu Gly Leu Pro Phe Ser Ser Phe Asp His Ser Lys Ala
      145             150             155             160
His Tyr Tyr Arg Tyr Asp Glu Gln Leu Asn Leu Cys Leu Glu Arg Leu
      165             170             175
Ser Ser Gly Lys Asp Lys Asn Lys Ser Val Leu Gln Asn Lys Tyr Val
      180             185             190
Arg Cys Ser Val Arg Ala Glu Val Arg His Leu Arg Arg Val Leu Cys
      195             200             205
His Arg Leu Met Leu Asn Pro Gln His Val Gln Leu Leu Phe Asp Asn

```

210                      215                      220  
 Glu Val Leu Pro Asp His Met Thr Met Lys Gln Ile Trp Leu Ser Arg  
 225                      230                      235                      240  
 Trp Phe Gly Lys Pro Ser Pro Leu Leu Leu Gln Tyr Ser Val Lys Glu  
                          245                      250                      255  
 Lys Arg Arg

<210> 3666

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3666

Met Lys Arg Thr Leu Glu Thr Met Arg Asn Thr Met Gly Glu Glu Thr  
   1                      5                      10                      15  
 Gly Glu Leu Trp Ser His Lys Pro Gly Phe Arg Ser Gln Phe Cys His  
                          20                      25                      30  
 Ser Pro Thr Glu Trp Pro Arg Thr Ala Phe Phe Arg Glu Gln Glu Gly  
                          35                      40                      45  
 Ala Ala Ser Leu Ser Ile Ala Trp Asp His Ile Gln Thr Gly Asp Val  
                          50                      55                      60  
 Ala Arg Ser Lys Ser Thr Ser Val Gly Ile Leu Val Asp Pro Gly Asp  
   65                      70                      75                      80  
 Pro Leu Leu Leu Arg Glu Leu Leu Arg Gly Leu Gly Tyr Asp Ser Arg  
                          85                      90                      95  
 Thr Lys Ser Phe Gly Arg Asp Phe Pro Ser Leu Asp Lys Glu Lys Glu  
                          100                      105                      110  
 Val Glu Leu Pro Ala Ala Ala Leu Gly Gly  
                          115                      120

<210> 3667

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3667

```

Met Leu Cys Val Tyr Phe Phe Lys Gly Ile Glu Asp Asn Asp Glu Leu
  1             5             10             15
Pro Ser Ala Lys Gly Arg Lys Val Leu Arg Ser Leu Val Val Cys Glu
          20             25             30
Asn Gly Leu Pro Ile Lys Glu Gly Leu Ser Cys Asn Gly Pro Arg Pro
      35             40             45
Val Gly Leu Arg Ser Thr Leu Gln Gly Arg Gly Glu Met Val Glu Gln
      50             55             60
Leu Arg Glu Leu Thr Arg Leu Leu Glu Ala Lys Asp Phe Arg Ser Arg
      65             70             75             80
Met Glu Gly Val Gly Gln Leu Leu Glu Leu Cys Lys Ala Lys Thr Glu
          85             90             95
Leu Val Thr Ala His Leu Val Gln Val Phe Asp Ala Phe Thr Pro Arg
          100             105             110
Leu Gln Asp Ser Asn Lys Lys Val Asn Gln Trp Ala Leu Glu Ser Phe
          115             120             125
Ala Lys Met Ile Pro Leu Leu Arg Glu Ser Leu His Pro Met Leu Leu
          130             135             140
Ser Ile Ile Ile Thr Val Ala Asp Asn Leu Asn Ser Lys Asn Ser Gly
          145             150             155             160
Ile Tyr Ala Ala Ala Val Ala Val Leu Asp Ala Met Val Glu Ser Leu
          165             170             175
Asp Asn Leu Cys Leu Leu Pro Ala Leu Ala Gly Arg Val Arg Phe Leu
          180             185             190
Ser Gly Arg Ala Val Leu Asp Val Thr Asp Arg Leu Ala Gly Glu His
          195             200             205
Pro Gln Pro His Pro Thr Pro Ser Pro Gly Arg Phe Leu Phe Ser Pro
          210             215             220
Gly Leu Trp Leu Asn His Ser Pro Ser Tyr Leu Arg Pro Glu Ile Ile
          225             230             235             240
Pro Pro Asn His Leu Lys Phe
          245

```

&lt;210&gt; 3668

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3668

```

Met Arg Arg Asp Arg Gly Pro Lys Pro Ala Leu Gly Gly Ala Gly Glu
 1             5             10             15
Val Glu Pro Gly Gly Met Ala Ala Ser Pro Thr Gly Arg Pro Arg Arg
      20             25             30
Leu Gln Arg Tyr Leu Gln Ser Gly Glu Phe Asp Gln Phe Arg Asp Phe
      35             40             45
Pro Ile Phe Glu Ser Asn Phe Val Gln Val Thr Arg Leu Gly Glu Val
      50             55             60

Ala Asn Glu Val Thr Met Gly Val Ala Ala Ser Ser Pro Ala Leu Glu
 65             70             75             80
Leu Pro Asp Leu Leu Leu Leu Ala Gly Pro Ala Lys Glu Asn Gly His
      85             90             95
Leu Gln Leu Phe Gly Leu Phe Pro Leu Lys Phe Val Gln Leu Phe Val
      100            105            110
His Asp Lys Ser Arg Cys Gln Leu Glu Val Lys Leu Asn Thr Ser Arg
      115            120            125
Thr Phe Tyr Leu Gln Leu Arg Ala Pro Leu Lys Thr Arg Asp Arg Glu
      130            135            140
Phe Gly Gln Trp Val Arg Leu Leu Tyr Arg Leu Arg Phe Leu Ser Ala
      145            150            155            160
Ser Ala Val Pro Phe Thr Gln Glu
      165

```

&lt;210&gt; 3669

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3669

Met Pro Val Cys Ser Ala Met Gly Arg Ile Leu Trp Met Lys Ala Lys  
 1 5 10 15  
 Gly Ser Ala Asn Ser Ser Gln Leu Gly Ser Lys Thr Gly His Ser Gly  
 20 25 30  
 Gly Gly Arg Asn Ser Pro Ser Gly Pro Gly Pro Pro Arg Gly Ser Ala  
 35 40 45  
 Gly Arg Gly Pro Gly Cys Ser Val Val Ala Ala Ser Ile Thr Ala Gly  
 50 55 60  
 Trp Ala Arg Ala Arg Arg Arg Trp Ala Pro Gly Pro Arg Leu Arg Ala  
 65 70 75 80  
 Pro Leu Gly Pro Arg Pro Val Gln Thr Arg Leu Glu Gln Gln Gln Val  
 85 90 95  
 Arg Val Val Arg Ala Thr Ala Ala Pro Trp Ala Phe Ser Ala Ser Asp  
 100 105 110  
 Asp Asp Val Ser Pro Gln Ala His Ala Val Arg Leu Arg Arg His Gly  
 115 120 125  
 Glu Glu Lys Glu Ser His Pro Thr Pro Ile Asp Pro Pro Ser Ala Arg  
 130 135 140  
 Gly Ser Pro Pro Arg Pro Arg Ile Gly Arg Gly Arg Ala Phe Arg Cys  
 145 150 155 160  
 Gly Trp Ser Leu Ser Leu Gly Phe Gln Leu Ser Gln Leu Leu Leu Thr  
 165 170 175  
 Ile Tyr Tyr Val Ser Glu Phe Leu Pro  
 180 185

&lt;210&gt; 3670

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3670

Met Asn Glu Trp Gln Ser Trp Gly Leu Asn Leu Asp Leu Phe Asp Ser  
 1 5 10 15

Ile Leu Leu Arg Thr Gln Leu His Glu Leu Cys Leu Ile Lys Ile Phe  
                   20                  25                  30  
 Gly Ala Phe Phe Phe Phe Ala Thr Lys Ser His Ser Val Thr Gln Ala  
                   35                  40                  45  
 Gly Gly Ala Val Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser  
                   50                  55                  60  
 Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Thr His  
                   65                  70                  75                  80  
 His His Ala Trp Leu Ile Phe Val Phe Leu Val Glu Ala Gly Phe His  
                   85                  90                  95  
 His Val Gly Glu Ala Ser Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro  
                   100                  105                  110  
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Leu Ser His His Thr  
                   115                  120                  125  
 Trp Pro Phe Ser Val Ile Leu Thr Asn Thr  
                   130                  135

<210> 3671

<211> 186

<212> PRT

<213> Homo sapiens

<400> 3671

Met Met Trp Asp Phe Lys Lys Tyr Tyr Val Ser Asn Phe Ser Lys Gln  
           1                  5                  10                  15  
 Leu Leu Asp Ser Ile Trp His Gln Pro Ile Phe Asn Leu Leu Ser Ile  
                   20                  25                  30  
 Gly Gln Ser Leu Tyr Ala Lys Ala Lys Glu Leu Asp Arg Val Lys Glu  
                   35                  40                  45  
 Ile Gln Glu Gln Leu Phe His Ile Lys Lys Leu Leu Lys Thr Cys Arg  
                   50                  55                  60  
 Phe Ala Asn Ser Ala Leu Lys Glu Phe Glu Gln Val Pro Gly His Leu  
                   65                  70                  75                  80  
 Thr Asp Glu Leu His Leu Phe Ser Leu Glu Asp Leu Val Arg Ile Lys  
                   85                  90                  95

Lys Gly Leu Leu Ala Pro Leu Leu Lys Asp Ile Leu Lys Ala Ser Leu  
                   100                  105                  110  
 Ala His Val Ala Gly Cys Glu Leu Cys Gln Gly Lys Gly Phe Ile Cys  
                   115                  120                  125  
 Glu Phe Cys Gln Asn Thr Thr Val Ile Phe Pro Phe Gln Thr Ala Thr  
                   130                  135                  140  
 Cys Arg Arg Cys Ser Ala Cys Arg Ala Cys Phe His Lys Gln Cys Phe  
                   145                  150                  155                  160  
 Gln Ser Ser Glu Cys Pro Arg Cys Ala Arg Ile Thr Ala Arg Arg Lys  
                   165                  170                  175  
 Leu Leu Glu Ser Val Ala Ser Ala Ala Thr  
                   180                  185

<210> 3672

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3672

Met Lys Val Ala Leu Leu Arg Phe Phe Ser Pro Pro Asn Met Ser Val  
           1                  5                  10                  15  
 Thr His Lys Glu Ala His Glu Arg Lys Cys Pro Glu Lys Pro Glu Leu  
                   20                  25                  30  
 Trp Lys Ala Gly Ser Thr Val Pro Leu Thr Ala Pro Glu Lys Thr Asp  
                   35                  40                  45  
 Pro Phe Pro Leu Cys Pro Pro Leu Ser Leu Thr Cys Pro Gln Gln Gln  
                   50                  55                  60  
 Ser Cys Ile Pro Ser Ser Ser Gln Asp Val Leu Asn Ser Leu Trp Val  
                   65                  70                  75                  80  
 Ser Ser His Cys Leu Gln Leu Lys Ile Ser Lys Thr Lys Thr His Cys  
                   85                  90                  95  
 Leu Pro Thr Gln Asn Val Leu Pro Phe Leu Leu Pro Thr Pro Val Ser  
                   100                  105                  110  
 Ile Val Cys Arg Leu Pro Gly Leu Asp Pro  
                   115                  120

&lt;210&gt; 3673

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3673

```

Met Pro Val Ile Ala Ala Val Gly His Val Val Leu Trp Trp Met Pro
  1             5             10             15
Val Ile Ala Thr Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile
      20             25             30
Ala Ala Val Gly Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala
      35             40             45
Val Gly Cys Val Val Leu Trp Trp Met Leu Val Ile Ala Thr Val Gly
      50             55             60
Arg Val Val Leu Trp Trp Met Pro Val Ile Ala Ala Val Gly His Val
      65             70             75             80
Val Leu Trp Trp Val Leu Ile Gln Phe Arg Thr His Val Ala Leu Gly
      85             90             95
Cys Leu Gly Pro Gln His Thr Gly Lys Leu Ile Ile Thr Gly Val Ala
      100            105            110
Cys Ser Leu Ser Thr Ala His Pro Gln Leu
      115            120

```

&lt;210&gt; 3674

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3674

```

Met Gly Lys Val Arg Thr Ala Cys Pro Ala Gly Gly Trp Gly Cys Ser
  1             5             10             15
Cys His Gln His Trp Ala Leu Ser Leu Gly Leu Arg Leu Ser Asp Arg
      20             25             30

```





&lt;210&gt; 3676

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

```

Met Thr Lys Asp Pro Pro Arg Val Thr Gln Pro Gly Pro Leu Val Arg
  1             5             10            15
Gly Pro Glu Cys Leu Gln Cys Pro Cys Ile Glu Ala Leu Asn Lys Ala
      20             25            30
Arg Ser Arg Cys Arg Gly Pro Leu Trp Ile Pro Pro Glu His Leu Pro
      35             40            45
Arg Ile Met Ala Pro Lys Thr Glu Gly Lys Glu Thr Ala Gln Phe Ala
      50             55            60
Lys Arg Gln Asp Leu Ser Thr Arg Val Ala Leu Trp Arg Leu Arg Lys
      65             70            75            80
Met Phe Ala Cys Gln Tyr Leu Leu Ser Phe Pro Pro Val Pro Thr Lys
      85             90            95
Arg Gly His Lys Ser Ser Ala Trp His Trp Arg Val Ser Glu Gly Pro
      100            105            110
Glu Ser Cys Val Ser His Gly Val Leu
      115            120

```

&lt;210&gt; 3677

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3677

```

Met Arg Lys Pro Arg Pro Arg Lys Val Lys Tyr Leu Ala Gln Gly His
  1             5             10            15
Thr Ala Ser Lys Glu Gly Ala Gly Leu Asp Ser Asn Ala Ser Leu Pro
      20             25            30
Leu Cys Ser Val Cys Gly Gln Pro Ala Pro Phe His Ile Cys Cys Leu
      35             40            45

```

Pro Gly Phe Leu Pro Glu Ala Pro Ile Ala Leu Arg Gly Val Gln Ala  
 50 55 60  
 Asp Pro Pro Val Leu Leu Leu Gly Pro Gly Glu Leu Glu Lys Pro Gly  
 65 70 75 80  
 Gly Gln Val Trp Val Gly Ser Pro Leu Pro Ser Ser Arg Ala Cys Pro  
 85 90 95  
 Pro Pro Ala Cys Ser Pro Leu Leu Asn Pro Met Pro Thr Phe Cys Lys  
 100 105 110  
 Leu Trp Leu Arg Lys Ser Ser Ser Ala Trp Leu Cys Thr Glu Val Ser  
 115 120 125  
 Ser Ala Trp Asn His Val Gln Met Arg Cys Ala Cys Ala His Val Glu  
 130 135 140  
 Trp Cys Ser Lys Asn Leu Tyr Ser Ala Ser Trp Lys Arg Ser His Ser  
 145 150 155 160  
 Arg Arg Pro Ala Gly Ala Ala Arg Ala Trp Glu Arg Arg Pro Gly Arg  
 165 170 175  
 Gly Cys Thr Pro Gly Pro Gly Gly Gly Arg Gly Arg Ala Gly Ala Glu  
 180 185 190  
 Pro Gly Gly Ser Arg Arg Ala Cys Arg His Thr Gly Pro Arg Gln Ala  
 195 200 205  
 Pro Cys Gln Ala Pro Gly Pro Arg Leu Ala Ser Pro Pro Arg Arg Lys  
 210 215 220  
 Gln Thr Gly Leu Trp Leu Pro Pro Ser Glu Pro Thr Pro Ser Leu Phe  
 225 230 235 240  
 Ser Arg Pro Glu Leu Leu Ile Pro Ser Ile Ser Phe Arg Pro Leu Gly  
 245 250 255  
 Thr Tyr Pro Arg Val Asp Ala Leu Ser His Ala Met Gly Ser Gly Met  
 260 265 270  
 Gly Trp Gly Val Leu Thr Leu Arg Ala Val Val Gly Leu Pro His Val  
 275 280 285  
 Arg Thr  
 290

&lt;210&gt; 3678

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3678

```

Met Val Gly Pro Ser His Leu Gly Asn Ser Ser Leu Met Gln Ser Val
  1              5              10             15
Thr Gln Gln Trp Cys Leu Gly Ala Ser Ala Cys Ile Gly Ala Gly Leu
      20              25             30
Val Pro Lys Pro Arg Pro Pro Pro Cys Gly Ser Thr Thr Gly Lys Gly
      35              40             45
Asn Asn Gln Thr Ser Ser Ser Val Val Met Arg Ile Gln Glu Asp His
      50              55             60
Val Asn Ile Gly Ile His Asn Gly Gln Thr Leu Trp Arg Met Pro Val
      65              70             75             80
Ile Pro Ala Ile Trp Glu Ala Glu Val Gly Arg Trp Arg Glu Pro Gln
      85              90             95
Asn Leu Lys Pro Ala Trp Ala Thr Trp Gln Asn Gln Ser Leu Leu Lys
      100             105             110
Ile Gln Lys Ile Gly
      115

```

&lt;210&gt; 3679

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

```

Met Leu Pro Leu Glu Pro Cys Arg Arg Pro Asn Phe Glu Leu Ile Pro
  1              5              10             15
Leu Leu Asn Ser Val Asp Ser Asp Asn Cys Gly Ser Met Val Pro Ser
      20              25             30
Phe Ala Asp Ile Leu Tyr Val Ala Asn Asp Glu Glu Ala Ser Tyr Leu
      35              40             45
Arg Phe Arg Asn Ser Ile Trp Lys Asn Glu Glu Glu Lys Val Glu Ile
      50              55             60

```

Phe His Pro Leu Arg Leu Val Arg Asp Pro Leu Ser Pro Ala Val Arg  
 65 70 75 80  
 Gln Lys Glu Thr Val Lys Asn Asp Leu Pro Val Asn Glu Ala Ala Ile  
 85 90 95  
 Arg Lys Ile Ala Ala Leu Glu Asn Glu Leu Thr Phe Leu Arg Ser Gln  
 100 105 110  
 Ile Ala Ala Ile Val Glu Met Gln Glu Leu Lys Asn Ser Thr Asn Ser  
 115 120 125  
 Ser Ser Phe Gly Leu Ser Asp Glu Arg Ile Ser Leu Gly Gln Leu Ser  
 130 135 140  
 Ser Ser Arg Ala Ala His Leu Ser Val Asp Pro Asp Gln Leu Pro Gly  
 145 150 155 160  
 Ser Val Leu Ser Pro Pro Pro Pro Pro Pro Leu Pro Pro Gln Phe Ser  
 165 170 175  
 Ser Leu Gln Pro Pro Cys Phe Pro Pro Val Gln Pro Gly Ser Asn Asn  
 180 185 190  
 Ile Cys Asp Ser Asp Asn Pro Ala Thr Glu Met Ser Lys Gln Asn Pro  
 195 200 205  
 Ala Ala Asn Lys Thr Asn Tyr Ser His His Ser Lys Ser Gln Arg Asn  
 210 215 220  
 Lys Asp Ile Pro Asn Met Leu Asp Val Leu Lys Asp Met Asn Lys Val  
 225 230 235 240  
 Lys Leu Arg Ala Ile Glu Arg Ser Pro Gly Gly Arg Pro Ile His Lys  
 245 250 255  
 Arg Lys Arg Gln Asn Ser His Trp Asp Pro Val Ser Leu Ile Ser His  
 260 265 270  
 Ala Leu Lys Gln Lys Phe Ala Phe Gln Glu Asp Asp Ser Phe Glu Lys  
 275 280 285  
 Glu Asn Arg Ser Trp Glu Ser Ser Pro Phe Ser Ser Pro Glu Thr Ser  
 290 295 300  
 Arg Phe Gly His His Ile Ser Gln Ser Glu Gly Gln Arg Thr Lys Glu  
 305 310 315 320  
 Glu Met Val Asn Thr Lys Ala Val Asp Gln Gly Ile Ser Asn Thr Ser  
 325 330 335  
 Leu Leu Asn Ser Arg Ile  
 340

&lt;210&gt; 3680

&lt;211&gt; 247

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

```

Met Gly Gln Gly Leu Pro Asp Glu Glu Gln Glu Lys Leu Leu Arg Ile
  1              5              10              15
Cys Ser Ile Tyr Thr Gln Ser Gly Glu Asn Ser Leu Val Gln Glu Gly
      20              25              30
Ser Glu Ala Ser Pro Ile Gly Lys Ser Pro Tyr Thr Leu Asp Ser Leu
      35              40              45
Tyr Trp Ser Val Lys Pro Ala Ser Ser Ser Phe Gly Ser Glu Ala Lys
      50              55              60
Ala Gln Gln Gln Glu Glu Gln Gly Ser Val Asn Asp Val Lys Glu Glu
      65              70              75              80
Glu Lys Glu Glu Lys Glu Val Leu Pro Asp Gln Val Glu Glu Glu Glu
      85              90              95
Glu Asn Asp Asp Gln Glu Glu Glu Glu Glu Asp Glu Asp Asp Glu Asp
      100             105             110
Asp Glu Glu Glu Asp Arg Met Glu Val Gly Pro Phe Ser Thr Gly Gln
      115             120             125
Glu Ser Pro Thr Ala Glu Asn Ala Arg Leu Leu Ala Gln Lys Arg Gly
      130             135             140
Ala Leu Gln Gly Ser Ala Trp Gln Val Ser Ser Glu Asp Val Arg Trp
      145             150             155             160
Asp Thr Phe Pro Leu Gly Arg Met Pro Gly Gln Thr Glu Asp Pro Ala
      165             170             175
Glu Leu Met Leu Glu Asn Tyr Asp Thr Met Tyr Leu Leu Asp Gln Pro
      180             185             190
Val Leu Glu Gln Arg Leu Glu Pro Ser Thr Cys Lys Thr Asp Thr Leu
      195             200             205
Gly Leu Ser Cys Gly Val Gly Ser Gly Asn Cys Ser Asn Ser Ser Ser
      210             215             220

```

Ser Asn Phe Glu Gly Leu Leu Trp Ser Gln Gly Gln Leu His Gly Leu  
 225                      230                      235                      240  
 Lys Thr Gly Leu Gln Leu Phe  
                                  245

<210> 3681

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3681

Met Gly Ser Ser Gln Ser Val Glu Ile Pro Gly Gly Gly Thr Glu Gly  
   1                      5                      10                      15  
 Tyr His Val Leu Arg Val Gln Glu Asn Ser Pro Gly His Arg Ala Gly  
                                  20                      25                      30  
 Leu Glu Pro Phe Phe Asp Phe Ile Val Ser Ile Asn Gly Ser Arg Leu  
                                  35                      40                      45  
 Asn Lys Asp Asn Asp Thr Leu Lys Asp Leu Leu Lys Ala Asn Val Glu  
                                  50                      55                      60  
 Lys Pro Val Lys Met Leu Ile Tyr Ser Ser Lys Thr Leu Glu Leu Arg  
   65                      70                      75                      80  
 Glu Thr Ser Val Thr Pro Ser Asn Leu Trp Gly Gly Gln Gly Leu Leu  
                                  85                      90                      95  
 Gly Val Ser Ile Arg Phe Cys Ser Phe Asp Gly Ala Asn Glu Asn Val  
                                  100                      105                      110  
 Trp His Val Leu Glu Val Glu Ser Asn Ser Pro Ala Ala Leu Ala Gly  
                                  115                      120                      125  
 Leu Arg Pro His Ser Asp Tyr Ile Ile Gly Ala Asp Thr Val Met Asn  
                                  130                      135                      140  
 Glu Ser Glu Asp Leu Phe Ser Leu Ile Glu Thr His Glu Ala Lys Pro  
   145                      150                      155                      160  
 Leu Lys Leu Tyr Val Tyr Asn Thr Asp Thr Asp Asn Cys Arg Glu Val  
                                  165                      170                      175  
 Ile Ile Thr Pro Asn Ser Ala Trp Gly Gly Glu Gly Ser Leu Gly Cys  
                                  180                      185                      190

Gly Ile Gly Tyr Gly Tyr Leu His Arg Ile Pro Thr Arg Pro Phe Glu  
 195 200 205  
 Glu Gly Lys Lys Ile Ser Leu Pro Gly Gln Met Ala Gly Thr Pro Ile  
 210 215 220  
 Thr Pro Leu Lys Asp Gly Phe Thr Glu Val Gln Leu Ser Ser Val Asn  
 225 230 235 240  
 Pro Pro Ser Leu Ser Pro Pro Gly Thr Thr Gly Ile Glu Gln Ser Leu  
 245 250 255  
 Thr Gly Leu Ser Ile Ser Ser Thr Pro Pro Ala Val Ser Ser Val Leu  
 260 265 270  
 Ser Thr Gly Val Pro Thr Val Pro Leu Leu Pro Pro Gln Val Asn Gln  
 275 280 285  
 Ser Leu Thr Ser Val Pro Pro Met Asn Pro Ala Thr Thr Leu Pro Gly  
 290 295 300  
 Leu Met Pro Leu Pro Ala Gly Leu Pro Asn Leu Pro Asn Leu Asn Leu  
 305 310 315 320  
 Asn Leu Pro Ala Pro His Ile Met Pro Gly Val Gly Leu Pro Glu Leu  
 325 330 335  
 Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn Leu  
 340 345 350  
 Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser Phe  
 355 360 365  
 Pro Leu Val Pro Glu Ser Ser Ser Ala Ala Ser Ser Gly Glu Leu Leu  
 370 375 380  
 Ser Ser Leu Pro Pro Thr Ser Asn Ala Pro Ser Asp Pro Ala Thr Thr  
 385 390 395 400  
 Thr Ala Lys Ala Asp Ala Ala Ser Ser Ser Leu Trp Met  
 405 410

<210> 3682

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3682



Met Arg Ser Leu Asp Phe Gly Met Arg Thr Gln Val Thr Arg Glu Ala  
 1 5 10 15  
 Ile Ser Arg Leu Cys Glu Ala Val Pro Gly Ala Asn Gly Ala Ile Lys  
 20 25 30  
 Lys Arg Lys Pro Pro Val Lys Phe Leu Ser Thr Val Leu Gly Lys Ser  
 35 40 45  
 Asn Leu Gln Phe Ser Gly Met Asn Ile Lys Leu Thr Ile Ser Thr Cys  
 50 55 60  
 Ser Leu Thr Leu Met Asn Leu Asp Asn Gln Gln Ile Ile Ala Asn His  
 65 70 75 80  
 His Met Gln Ser Ile Ser Phe Ala Ser Gly Gly Asp Pro Asp Thr Thr  
 85 90 95  
 Asp Tyr Val Ala Tyr Val Ala Lys Asp Pro Val Asn Gln Arg Ala Cys  
 100 105 110  
 His Ile Leu Glu Cys His Asn Gly Met Ala Gln Asp Val Ile Ser Thr  
 115 120 125  
 Ile Gly Gln Ala Phe Glu Leu Arg Phe Lys Gln Tyr Leu Lys Asn Pro  
 130 135 140  
 Ser Leu Asn Thr Ser Cys Glu Ser Glu Glu Val His Ile Asp Ser His  
 145 150 155 160  
 Ala Glu Glu Arg Glu Asp His Glu Tyr Tyr Asn Glu Ile Pro Gly Lys  
 165 170 175  
 Gln Pro Pro Val Gly Gly Val Ser Asp Met Arg Ile Lys Val Gln Ala  
 180 185 190  
 Thr Glu Gln Met Ala Tyr Cys Pro Ile Gln Cys Glu Lys Leu Cys Tyr  
 195 200 205  
 Leu Pro Gly Asn Ser Lys Cys Ser Ser Val Tyr Glu Asn Cys Leu Glu  
 210 215 220  
 Gln Ser Arg Ala Ile Gly Asn Val His Pro Arg Gly Val Gln Ser Gln  
 225 230 235 240  
 Arg Asp Thr Ser Leu Leu Lys His Thr Cys Arg Val Asp Leu Phe Asp  
 245 250 255  
 Asp Pro Cys Tyr Ile Asn Thr Gln Ala Leu Gln Ser Thr Pro Gly Ser  
 260 265 270  
 Ala Gly Asn Gln Arg Ser Ala Gln Pro Leu Gly Ser Pro Trp His Cys

275                      280                      285  
 Gly Lys Ala Pro Glu Thr Val Gln Pro Gly Ala Thr Ala Gln Pro Ala  
 290                      295                      300  
 Ser Ser His Ser Leu Pro His Ile Lys Gln Gln Leu Trp Ser Glu Glu  
 305                      310                      315                      320  
 Cys Tyr His Gly Lys Leu Ser Arg Lys Ala Ala Glu Ser Leu Leu Val  
 325                      330                      335  
 Lys Asp Gly Asp Phe Leu Val Arg Glu Ser Ala Thr Ser Pro Gly Gln  
 340                      345                      350  
 Tyr Val Leu Ser Gly Leu Gln Gly Gly Gln Ala Lys His Leu Leu Leu  
 355                      360                      365  
 Val Asp Pro Glu Gly Lys Val Arg Thr Lys Asp His Val Phe Asp Asn  
 370                      375                      380  
 Val Gly His Leu Ile Arg Tyr His Met Asp Asn Ser Leu Pro Ile Ile  
 385                      390                      395                      400  
 Ser Ser Gly Ser Glu Val Ser Leu Lys Gln Pro Val Arg Lys Asp Asn  
 405                      410                      415  
 Asn Pro Ala Leu Leu His Ser Asn Lys  
 420                      425

<210> 3683

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3683

Met Asp Gly Leu Lys Val Gly His Asp Pro Ala Lys Glu Phe Thr Asn  
 1                      5                      10                      15  
 His Trp Trp Asn Glu Leu Phe Asn Lys Thr Ala Ala Asn Leu Val Val  
 20                      25                      30  
 Glu Thr Gly Gln Asp Gly Val Gln Ile Arg Ser Leu Ser Lys Glu Thr  
 35                      40                      45  
 Thr Arg Tyr Asn His Pro Lys Pro Asn Leu Leu Tyr Gln Lys Phe Val  
 50                      55                      60  
 Lys Val Leu Glu Ala Val Gly Asn Arg Val His Pro Phe Ser Leu Pro

65                      70                      75                      80  
 Trp Phe Pro Trp Gly Leu Asn Ser Cys Leu Val Cys Leu Ile Asn Ser  
                             85                      90                      95  
 Gln Asn Phe Pro Asn Ile Val Gly Ser Cys Asp Gln Pro Cys Cys Cys  
                             100                      105                      110  
 Leu Leu Arg Leu Pro Arg Pro Ser Ala Gly Ile Glu Ile Phe Arg Phe  
                             115                      120                      125  
 Arg Gly Ser Cys His Leu Leu Arg Glu Gln Gln  
                             130                      135

<210> 3684

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3684

Met Ala Lys Arg Leu Gln Ala Glu Leu Ser Cys Pro Val Cys Leu Asp  
 1                      5                      10                      15  
 Phe Phe Ser Cys Ser Ile Ser Leu Ser Cys Thr His Val Phe Cys Phe  
                             20                      25                      30  
 Asp Cys Ile Gln Arg Tyr Ile Leu Glu Asn His Asp Phe Arg Ala Met  
                             35                      40                      45  
 Cys Pro Leu Cys Arg Asp Val Val Lys Val Pro Ala Leu Glu Glu Trp  
                             50                      55                      60  
 Gln Val Ser Val Leu Thr Leu Met Thr Lys Gln His Asn Ser Arg Leu  
 65                      70                      75                      80  
 Glu Gln Ser Leu His Val Arg Glu Glu Leu Arg His Phe Arg Glu Asp  
                             85                      90                      95  
 Val Thr Leu Asp Ala Ala Thr Ala Ser Ser Leu Leu Val Phe Ser Asn  
                             100                      105                      110  
 Asp Leu Arg Ser Ala Gln Cys Lys Lys Ile His His Asp Leu Thr Lys  
                             115                      120                      125  
 Asp Pro Arg Leu Ala Cys Val Leu Gly Thr Pro Cys Phe Ser Ser Gly  
                             130                      135                      140  
 Gln His Tyr Trp Glu Val Glu Val Gly Glu Val Lys Ser Trp Ser Leu

145                      150                      155                      160  
 Gly Val Cys Lys Glu Pro Ala Asp Arg Lys Ser Asn Asp Leu Phe Pro  
                             165                      170                      175  
 Gly His Gly Phe Trp Ile Ser Met Lys Ala Gly Ala Ile His Ala Asn  
                             180                      185                      190  
 Thr His Leu Glu Arg Ile Pro Ala Ser Pro Arg Leu Arg Arg Val Gly  
                             195                      200                      205  
 Ile Phe Leu Asp Ala Asp Leu Glu Glu Ile Gln Phe Phe Asp Val Asp  
                             210                      215                      220  
 Asn Asn Val Leu Ile Tyr Thr His Asp Gly Phe Phe Ser Leu Glu Leu  
 225                      230                      235                      240  
 Leu Cys Pro Phe Phe Cys Leu Glu Leu Leu Gly Glu Gly Glu Ser Gly  
                             245                      250                      255  
 Asn Val Leu Thr Ile Cys Pro  
                             260

<210> 3685

<211> 194

<212> PRT

<213> Homo sapiens

<400> 3685

Met Asp Trp Gly Gly Gly Ser Thr Leu Thr Pro Ala Gly Ala Ser Ala  
   1                      5                      10                      15  
 Gln Glu Pro Arg Leu Ala Gln Pro Ser Leu Gly Arg Pro Ile Pro Arg  
                             20                      25                      30  
 Val Pro His Pro Val Ser Val Ser Thr Asp Gln Gly Leu Pro Asp Thr  
                             35                      40                      45  
 Cys Ser Gly Val Ala Met Gly Thr Ser Gly Arg Val Ser Val Ala His  
                             50                      55                      60  
 Thr Ala Val Cys Arg His Thr Glu Gly Met His Ala Cys Val Cys Ala  
   65                      70                      75                      80  
 His Leu His Val Phe Thr Arg Thr Gly His Arg Arg Arg Cys Ser His  
                             85                      90                      95  
 Ser Gly Val His Arg Pro Leu Cys Arg Cys Ala His Thr Gln Gln Gly

100 105 110  
 Tyr Val His Arg Arg Val Cys Val Leu Ala Pro Gly Gly Gly Ser Arg  
 115 120 125  
 Pro Thr Pro His Ile Val Tyr Ser Val Pro Ala Ala Arg Thr Cys Leu  
 130 135 140  
 Gly Ala Pro Gly Ser Leu Ser Pro Cys His Leu Cys Val His Ile Cys  
 145 150 155 160  
 Ala His Thr Tyr Ser Gly Thr Pro Val Cys Val His Gly Cys Pro Gly  
 165 170 175  
 Thr Leu Gly Ser Pro Ser Pro Arg Leu Pro Arg Leu Leu Glu Ser Gly  
 180 185 190  
 Thr Phe

<210> 3686

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3686

Met Arg Ser Phe Leu Leu Val Trp Lys Leu Phe Arg Arg Lys Asp Met  
 1 5 10 15  
 Lys His Gln Arg Lys Thr Ala Thr Glu Phe Lys Thr Thr Glu Glu Gly  
 20 25 30  
 Glu Thr Arg Gln Asp Gly Lys Asp Gly Ser Leu Thr Tyr Arg Ala Asp  
 35 40 45  
 Thr Cys Ser Pro Cys Pro Glu Ala Gly Gly Pro Pro Ser Ser Ser Ile  
 50 55 60  
 Ala Ser Gly Ser Ser Ile Ser Val Gly Asn Ser Pro Ser His Ser His  
 65 70 75 80  
 Ser His Thr Ser Arg Arg Cys Gly Gly Ser Ser Arg Ser Arg Glu Cys  
 85 90 95  
 Cys Ser Ser Leu His Ser Ser Arg Gly Ser Arg Gly Ser Ser Trp Ser  
 100 105 110  
 Ser Ser Pro Pro Gly Ser Thr Cys Arg Trp Cys Ser Cys His Ser His

115                      120                      125  
 His His Ser His His Arg Ser His His Arg Ser His His Cys Ser His  
 130                      135                      140  
 His His Ser His His His Ser Gly His His Ser His His Asn Phe His  
 145                      150                      155                      160  
 Asn His Ser Asn Pro Trp Cys Gln  
 165

<210> 3687

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3687

Met Leu Val Met Glu Asp Gln His Asn Ser Glu Ile Glu Ser Leu Gln  
 1                      5                      10                      15  
 Lys Ala Leu Gly Val Ala Arg Glu Asp Asn Arg Lys Leu Ala Met Ser  
 20                      25                      30  
 Leu Glu Gln Ala Leu Gln Thr Asn Asn His Leu Gln Thr Lys Leu Asp  
 35                      40                      45  
 His Ile Gln Glu Gln Leu Glu Ser Lys Glu Leu Glu Arg Gln Asn Leu  
 50                      55                      60  
 Glu Thr Phe Lys Asp Arg Met Thr Glu Glu Ser Lys Val Glu Ala Glu  
 65                      70                      75                      80  
 Leu His Ala Glu Arg Ile Glu Ala Leu Arg Lys Gln Phe Gln Thr Glu  
 85                      90                      95  
 Arg Glu Thr Thr Lys Lys Val Ala Gln Arg Glu Val Ala Glu Leu Lys  
 100                      105                      110  
 Lys Ala Leu Asp Glu Ala Asn Phe Arg Ser Val Glu Val Ser Arg Thr  
 115                      120                      125  
 Asn Arg Glu Leu Arg Gln Lys Leu Ala Glu Leu Glu Lys Ile Leu Glu  
 130                      135                      140  
 Ser Asn Lys Glu Lys Ile Lys Asn Gln Lys Thr Gln Ile Lys Leu His  
 145                      150                      155                      160  
 Leu Ser Ala Lys Ala Asn Asn Ala Gln Asn Ile Glu Arg Met Lys Val

165 170 175  
 Val Trp Glu Thr Ser Ser His Phe Leu Asp Thr Leu  
 180 185

<210> 3688

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3688

Met Thr Cys Trp Glu Gly Asn Cys His Val Cys Ser Ser Pro Gly Gly  
 1 5 10 15  
 Ser Asp Val Phe Leu Ile Ile Leu Gln Val Pro Lys Ala His Pro Cys  
 20 25 30  
 Leu Trp Gly His Ile Thr Ser His Val Thr Leu Cys Ser Phe Gly Thr  
 35 40 45  
 Met Ser Leu Trp Thr Val Trp Leu Ile Val Val Val Gln Gly Gln Val  
 50 55 60  
 Met Cys His Pro Ser Leu Lys Cys Leu His Pro Val Asn Cys Leu Ala  
 65 70 75 80  
 Tyr Phe Pro Leu Thr Pro Gly Ser Gly Pro Ser Ser Leu Leu Ser Pro  
 85 90 95  
 Tyr Leu Ser Pro His Ile Gln Ser Pro Pro Lys Ile Leu Pro Val Leu  
 100 105 110  
 Leu Leu Cys Pro Phe Glu Arg Ala Gln Ser Phe Ile Leu  
 115 120 125

<210> 3689

<211> 343

<212> PRT

<213> Homo sapiens

<400> 3689

Met His His Thr Arg Glu Ser Lys Asp Gly Glu Pro Ser Pro Arg Ser

1	5	10	15
Ala Ala His Thr Met Pro Arg Arg Lys Lys Gly Tyr Cys Glu Cys Cys			
20	25	30	
Gln Glu Ala Phe Glu Glu Leu His Val His Leu Gln Ser Ala Gln His			
35	40	45	
Arg Ser Phe Ala Leu Glu Ala His Leu Tyr Ala Glu Val Asp Arg Ile			
50	55	60	
Ile Ala Gln Leu Ser His Ser Phe Ala Asp Ile Pro Phe Gln Ala Gly			
65	70	75	80
Leu Pro Arg Trp Ser Gly Ser Pro Ala Ser Asp Cys Asp Pro Leu Cys			
85	90	95	
Pro Glu Thr Leu His Pro His Gln Pro Ser His Pro Arg Ala Ala Ser			
100	105	110	
Pro Arg Ile Arg Lys Glu Asp Ser Cys Gln Ala Ser Val Thr Gln Gly			
115	120	125	
Arg Ala Ala Gly Gln Gln Arg Trp Thr Glu Ser Leu Asp Gly Val Met			
130	135	140	
Gly Pro Pro Ala Ser His Thr Cys Val Ser Ala Thr Thr Leu Leu Pro			
145	150	155	160
Ala Leu Pro Lys Gly Ser Arg Glu Gln Gly Cys Leu Cys Pro Cys Pro			
165	170	175	
Ala Ser Phe Thr Gln Ser His Leu Val Thr Ser Leu Ala Leu Leu Pro			
180	185	190	
Gly Glu Trp Ser Pro Ala Glu Asp Met Pro Leu His Pro Ser Gln Glu			
195	200	205	
Asn Ser Phe Ala Pro Ala Asp Ile Pro Val Lys Gly Pro Leu Leu Phe			
210	215	220	
Pro Glu Ala Arg Pro Trp Leu Met Ser Ala Arg Cys Trp Val Arg Pro			
225	230	235	240
Phe Pro Phe Val Thr Trp Gly Cys Leu Ile Pro His Asp Thr Thr Pro			
245	250	255	
Leu His Glu Glu Val Ser Pro Cys Pro Cys Leu Arg Leu Gly Tyr Leu			
260	265	270	
Tyr Leu Leu Leu Thr Gln Ser Leu Trp Cys Arg Val Arg Val Pro Ser			
275	280	285	
Leu Ser Thr Ala Gly Pro Ile Pro Arg Thr Ser His Pro Cys Thr Leu			



290	295	300	
Ala Phe Pro Ser Tyr Leu Asn Asp His Asp Leu Gly His Leu Cys Gln			
305	310	315	320
Ala Lys Pro Gln Gly Trp Asn Thr Pro Gln Pro Phe Leu His Cys Gly			
	325	330	335
Phe Leu Ala Val Asp Ser Gly			
340			

&lt;210&gt; 3690

&lt;211&gt; 333

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

Met Cys Arg Gly Gly Arg Met Phe Ala Pro Thr Lys Thr Trp Arg Arg			
1	5	10	15
Trp His Arg Arg Val Asn Thr Thr Gln Lys Arg Tyr Ala Ile Cys Ser			
	20	25	30
Ala Leu Ala Ala Ser Ala Leu Pro Ala Leu Val Met Ser Lys Gly His			
	35	40	45
Arg Ile Glu Glu Val Pro Glu Leu Pro Leu Val Val Glu Asp Lys Val			
	50	55	60
Glu Gly Tyr Lys Lys Thr Lys Glu Ala Val Leu Leu Leu Lys Lys Leu			
	65	70	75
Lys Ala Trp Asn Asp Ile Lys Lys Val Tyr Ala Ser Gln Arg Met Arg			
	85	90	95
Ala Gly Lys Gly Lys Met Arg Asn Arg Arg Arg Ile Gln Arg Arg Gly			
	100	105	110
Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe Arg			
	115	120	125
Asn Ile Pro Gly Ile Thr Leu Leu Asn Val Ser Lys Leu Asn Ile Leu			
	130	135	140
Lys Leu Ala Pro Gly Gly His Val Gly Arg Phe Cys Ile Trp Thr Glu			
	145	150	155
Ser Ala Phe Arg Lys Leu Asp Glu Leu Tyr Gly Thr Trp Arg Lys Ala			

165	170	175
Ala Ser Leu Lys Ser Asn Tyr Asn Leu Pro Met His Lys Met Ile Asn		
180	185	190
Thr Asp Leu Ser Arg Ile Leu Lys Ser Pro Glu Ile Gln Arg Ala Leu		
195	200	205
Arg Ala Pro Arg Lys Lys Ile His Arg Arg Val Leu Lys Lys Asn Pro		
210	215	220
Leu Lys Asn Leu Arg Ile Met Leu Lys Leu Asn Pro Tyr Ala Lys Thr		
225	230	235
Met Arg Arg Asn Thr Ile Leu Arg Gln Ala Arg Asn His Lys Leu Arg		
245	250	255
Val Asp Lys Ala Ala Ala Ala Ala Ala Ala Leu Gln Ala Lys Ser Asp		
260	265	270
Glu Lys Ala Ala Val Ala Gly Lys Lys Pro Val Val Gly Lys Lys Gly		
275	280	285
Lys Lys Ala Ala Val Gly Val Lys Lys Gln Lys Lys Pro Leu Val Gly		
290	295	300
Lys Lys Ala Ala Ala Thr Lys Lys Pro Ala Pro Glu Lys Lys Pro Ala		
305	310	315
Glu Lys Lys Pro Thr Thr Glu Glu Lys Lys Pro Ala Ala		
325	330	

&lt;210&gt; 3691

&lt;211&gt; 364

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3691

Met Pro Thr Leu Val Val Gly Thr Pro Pro Thr Cys Leu Gly Asp Thr
1 5 10 15
Pro Gln Pro Cys His Lys Asn Ser Gln Arg Gln Gly Pro Phe Ser His
20 25 30
Gly Ala Pro Gly Arg Ala Ala Asp Trp Lys Ala Val Ala Lys Pro Arg
35 40 45
Leu Cys Ala Pro Ala Ala Glu Asp Asp Val Ala Ala Leu Arg Trp Pro

50	55	60
Gly Pro Ser Gln Gln Pro Asp Pro Pro Trp Ala Ala Pro His Val Val		
65	70	75
Gly Ser Asp Asp Leu Lys Glu Pro Gly Pro Trp Gly Lys Ala Cys Ser		
85	90	95
Leu Pro Met Trp Ser Thr Gly Pro Glu Ala Arg Asp Gly Asp Ser Ser		
100	105	110
Val Ser Ser Gly Arg Leu Ser Cys Ser Ser Gly Gly His Asp Val Cys		
115	120	125
Val Ser Trp Lys Glu Arg Pro Pro Gln Val Leu Gly Pro Gln Gln Arg		
130	135	140
Pro Arg Lys Ser Asp Ala Arg Leu Glu Gln Leu Arg Asp Lys Ile Arg		
145	150	155
Ala Gln Ala Trp Gln Gln Gly Ser Cys Ala Ser Leu Gly Thr Ser Ala		
165	170	175
Pro Ser Ser Ala Ser Arg Leu His Lys Ala Ser Met Leu Thr Leu Arg		
180	185	190
Arg Lys Gly Gln Glu Ala Lys Asn Pro Pro Pro Ala Pro Glu Cys Ser		
195	200	205
Gly Phe Ser Ile Leu Ser Ala Ala Glu Arg Arg Val Glu Ala Lys Ala		
210	215	220
Ser His Gly Gln Gly Arg Glu Leu Ser Arg Val Ser Gln His Gln Val		
225	230	235
Pro Val Leu Arg Glu Lys Pro Lys Arg Val Lys Ser Ser Ser Cys Lys		
245	250	255
Arg Glu Lys Thr Pro Lys Leu Pro Ser Pro Arg Arg Ala Ala Lys Asp		
260	265	270
Lys His Lys Asp Glu Gly Trp Gln Ser Cys Ser His Phe Val Asp Glu		
275	280	285
Ala Thr Glu Val His Arg Val Ser Thr Ala Cys Pro Gly Leu His Arg		
290	295	300
Gly Arg Ala Ser His Pro Ser Ser Pro Arg Pro Val Leu Leu Thr Trp		
305	310	315
Lys Pro Ser Arg Val His Leu Gly Pro Arg Leu Gly Ser Leu Ser Arg		
325	330	335
Pro Pro Ser Arg Arg Gly Phe Trp Gly His Arg Thr Thr Ala Phe Trp		

340                      345                      350  
 Arg His Gln Gln Glu Pro Pro Gly Gly Val Asn Ala  
 355                      360

<210> 3692

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3692

Met Trp Lys Gly Phe Ile Leu Thr Val Val Glu Leu Arg Val Pro Thr  
 1                      5                      10                      15  
 Asp Leu Thr Leu Leu Pro Gly His Leu Tyr Met Met Ser Glu Val Leu  
 20                      25                      30  
 Ala Lys Glu Glu Ala Arg Arg Ala Leu Glu Thr Pro Ser Cys Phe Leu  
 35                      40                      45  
 Lys Val Ser Arg Leu Glu Ala Gln Leu Leu Leu Glu Arg Tyr Pro Glu  
 50                      55                      60  
 Cys Gly Asn Leu Leu Leu Arg Pro Ser Gly Asp Gly Ala Asp Gly Val  
 65                      70                      75                      80  
 Ser Val Thr Thr Arg Gln Met His Asn Gly Thr His Val Val Arg His  
 85                      90                      95  
 Tyr Lys Val Lys Arg Glu Gly Pro Lys Tyr Val Ile Asp Val Glu Gln  
 100                      105                      110  
 Pro Phe Ser Cys Thr Ser Leu Asp Ala Val Val Asn Tyr Phe Val Ser  
 115                      120                      125  
 His Thr Lys Lys Ala Leu Val Pro Phe Leu Leu Asp Glu Asp Tyr Glu  
 130                      135                      140  
 Lys Val Leu Gly Tyr Val Glu Ala Asp Lys Glu Asn Gly Glu Asn Val  
 145                      150                      155                      160  
 Trp Val Ala Pro Ser Ala Pro Gly Pro Gly Pro Ala Pro Cys Thr Gly  
 165                      170                      175  
 Gly Pro Lys Pro Leu Ser Pro Ala Ser Ser Gln Asp Lys Leu Pro Pro  
 180                      185                      190  
 Leu Pro Pro Leu Pro Asn Gln Glu Glu Asn Tyr Val Thr Pro Ile Gly

195	200	205
Asp Gly Pro Ala Val Asp Tyr Glu Asn Gln Asp Val Ala Ser Ser Ser		
210	215	220
Trp Pro Val Ile Leu Lys Pro Lys Lys Leu Pro Lys Pro Pro Ala Lys		
225	230	235
Leu Pro Lys Pro Pro Val Gly Pro Lys Pro Glu Lys Gly Phe His His		
245	250	255
Val Ala Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Thr		
260	265	270
Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His His Thr Trp		
275	280	285
Pro His Leu Ser Ser Leu Pro Glu Pro Lys Val Phe Asn Gly Gly Leu		
290	295	300
Gly Arg Lys Leu Pro Val Ser Ser Ala Gln Pro Leu Phe Pro Thr Ala		
305	310	315
Gly Leu Ala Asp Met Thr Ala Glu Leu Gln Lys Lys Leu Glu Lys Arg		
325	330	335
Arg Ala Leu Glu His		
340		

&lt;210&gt; 3693

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3693

Met Trp Leu Val Glu Cys Thr Gly Arg Asp Leu Thr Gly Leu Ser Cys
1 5 10 15
Leu Leu Gly Met Asp Arg Gln Pro Arg Arg Arg Gln His Val Ala Gly
20 25 30
Cys Arg Asp Val Pro Pro Pro Leu Pro Gln Gly Ser Trp Gly Gln Thr
35 40 45
Ser Pro Arg His Ser Ile Leu Cys Ser Lys Ser Gly Cys Asp Leu Leu
50 55 60
Gly Gly Gly Glu Tyr Asn Gly Glu Thr Ser Gly Glu Glu Phe Leu Ala

65                      70                      75                      80  
 Pro Ala Trp Thr Cys Arg Ala Gln Gln Ala Ala Thr Trp Leu Ser Val  
                             85                      90                      95  
 Gln Gln Thr Ser His Lys Ala Leu Gly Pro Ala Gly Gly Ala Ala Met  
                             100                      105                      110  
 Ser Ser Lys Leu Ser Pro Glu Glu Gln Phe Leu Ser Arg Ile His Phe  
                             115                      120                      125  
 Leu Arg Thr Phe Met Cys Ser Val Ala Gly Ala Glu Leu Pro Gly Ile  
                             130                      135                      140  
 Pro Gln Ala Thr Glu Asn Gly Glu Gly Cys Arg Pro Ala Arg Asp Pro  
 145                      150                      155                      160  
 Ala Ser Ser Pro Ser Ser Leu Ser Met Ala Ser Val Cys Thr Gln Cys  
                             165                      170                      175  
 Ser Ser Ala Gln Leu Val Ser Ala Leu Ser  
                             180                      185

<210> 3694

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3694

Met Lys Thr His Ser Leu Thr Ile Thr Arg Thr Ala Ser Arg Gly Gly  
   1                      5                      10                      15  
 Ala Asn Pro Phe Val Arg Ser Cys Pro His Asp Pro Ile Thr Ser His  
                             20                      25                      30  
 His Ala Leu Pro Pro Thr Leu Gly Ile Ile Ile Glu His Glu Met Trp  
                             35                      40                      45  
 Met Gly Thr Gln Ile Gln Thr Ile Ser Lys Cys Val Val Phe Phe Phe  
                             50                      55                      60  
 Leu Gly Leu Phe Ala Phe Leu Asp Arg Val Val Ser Phe Cys Phe Phe  
   65                      70                      75                      80  
 Arg Leu Glu Cys Ile Gly Ala Ile Val Ala Gln Leu Gln Pro Pro Thr  
                             85                      90                      95  
 Pro Gly Leu Lys Gln Ser Ser Gly Leu Arg Leu Tyr Phe Leu Cys Asp

100 105 110  
 Trp Gln Asp Met Tyr Leu  
 115

<210> 3695

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3695

Met Ala Val Gly Ile Leu Thr Gln Thr Val Gly Pro Trp Pro Arg Leu  
 1 5 10 15  
 Val Ala Tyr Leu Ser Lys Gln Leu Asp Gly Val Phe Lys Asp Trp Pro  
 20 25 30  
 Pro Cys Leu Arg Ala Leu Ala Ala Thr Ala Leu Leu Ala Gln Glu Val  
 35 40 45  
 Asp Lys Leu Thr Leu Gly Gln Asn Leu Asn Ile Lys Ala Ser His Ala  
 50 55 60  
 Val Val Thr Leu Met Asn Thr Lys Gly His His Trp Leu Met Asn Ala  
 65 70 75 80  
 Arg Leu Thr Arg Tyr Gln Asn Leu Leu Cys Glu Lys Pro Cys Ile Thr  
 85 90 95  
 Ile Glu Val Cys Asn Thr Leu Asn Pro Ala Thr Leu Leu Pro Val Pro  
 100 105 110  
 Glu Ser Pro Val Glu Gln Asn Cys Val Glu Val Leu Asp Thr Val Tyr  
 115 120 125  
 Ser Ser Arg Leu Asp Leu Gln Asp His Thr Trp Ala Ser Val Asp Trp  
 130 135 140  
 Glu Leu Tyr Val Asp Arg Ser Ser Phe Val Asn Pro Gln Gly Glu Arg  
 145 150 155 160  
 Cys Ala

&lt;210&gt; 3696

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3696

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Met Gln Gln Asp Pro Glu Leu Pro Ser Val Thr Arg Phe Cys Leu Pro
  1              5              10              15
Leu Cys Ala Arg Cys Tyr Val Gln Pro Gln Trp Val Phe Asp Ser Val
              20              25              30
Asn Ala Arg Leu Leu Leu Pro Val Ala Glu Tyr Phe Ser Gly Val Gln
              35              40              45
Leu Pro Pro His Leu Ser Pro Phe Val Thr Glu Lys Glu Gly Asp Tyr
              50              55              60
Val Pro Pro Glu Lys Leu Lys Leu Leu Ala Leu Gln Arg Gly Glu Asp
              65              70              75              80
Pro Gly Glu Arg Asp Gly Thr Gly Leu Ala Leu Thr Pro Gly Pro Thr
              85              90              95
Leu Ala Val Ser Leu Ser Cys Gln Gly Gly Lys Leu Gln Gly Thr Gly
              100             105             110
Ser Arg Ser Arg Lys Pro Phe Glu Val Thr Cys Arg Ile Arg Leu Arg
              115             120             125
Arg Arg Asp Ile Tyr Leu Leu Gly Ser Gly Val Ile
              130             135             140

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&lt;210&gt; 3697

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3697

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Met His Ser Arg His Leu Lys Ile Leu Ser His His Cys Cys Pro Val
  1              5              10              15
Thr Thr Leu His Val Asn Ala Ser Leu Ser Leu Glu Leu Ser Leu Ser
              20              25              30

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Tyr	Ser	Gln	Leu	Pro	Pro	Pro	Asn	Thr	Phe	Arg	Ala	Gln	Val	Phe	Ser
35				40				45							
Val	Thr	Leu	Ala	Ser	Leu	Pro	Cys	Leu	Leu	Leu	Leu	Cys	Lys	Ser	Asn
50				55				60							
Ser	Pro	Leu	Cys	Pro	Val	Leu	Phe	Ser	Ser	Leu	Leu	His	Ser	Ile	Pro
65				70				75				80			
Arg	Leu	Pro	Gln	Asp	Arg	Val	Ala	Ser	Ala	Leu	Asn	Glu	Phe	Phe	Ser
85				90				95							
Pro	Gly	Leu	Gln	Gly	Pro	Gln	Arg	Ser	Ser	Ser	Tyr	Tyr	Phe	Met	Asp
100				105				110							
Cys	Met	Asn	Ser	Thr	His	Leu	Val	Thr	Ser	Trp	Gln	Val	Val	Trp	Arg
115				120				125							

&lt;210&gt; 3698

 $\langle 211 \rangle$  201

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3698

Met	Gly	Asn	Val	Met	Glu	Gly	Lys	Ser	Val	Glu	Glu	Leu	Ser	Ser	Thr
1				5					10					15	
Glu	Cys	His	Gln	Trp	Tyr	Lys	Lys	Phe	Met	Thr	Glu	Cys	Pro	Ser	Gly
			20					25					30		
Gln	Leu	Thr	Leu	Tyr	Glu	Phe	Arg	Gln	Phe	Phe	Gly	Leu	Lys	Asn	Leu
		35					40					45			
Ser	Pro	Ser	Ala	Ser	Gln	Tyr	Val	Glu	Gln	Met	Phe	Glu	Thr	Phe	Asp
	50					55					60				
Phe	Asn	Lys	Asp	Gly	Tyr	Ile	Asp	Phe	Met	Glu	Tyr	Val	Ala	Ala	Leu
65					70					75					80
Ser	Leu	Val	Leu	Lys	Gly	Lys	Val	Glu	Gln	Lys	Leu	Arg	Trp	Tyr	Phe
			85						90					95	
Lys	Leu	Tyr	Asp	Val	Asp	Gly	Asn	Gly	Cys	Ile	Asp	Arg	Asp	Glu	Leu
		100						105					110		
Leu	Thr	Ile	Ile	Gln	Ala	Ile	Arg	Ala	Ile	Asn	Pro	Cys	Ser	Asp	Thr
	115					120						125			

Thr Met Thr Ala Glu Glu Phe Thr Asp Thr Val Phe Ser Lys Ile Asp  
 130 135 140  
 Val Asn Gly Asp Gly Glu Leu Ser Leu Glu Glu Phe Ile Glu Gly Val  
 145 150 155 160  
 Gln Lys Asp Gln Met Leu Leu Asp Thr Leu Thr Arg Ser Leu Asp Leu  
 165 170 175  
 Thr Arg Ile Val Arg Arg Leu Gln Asn Gly Glu Gln Asp Glu Glu Gly  
 180 185 190  
 Ala Asp Glu Ala Ala Glu Ala Ala Gly  
 195 200

<210> 3699

<211> 1394

<212> PRT

<213> Homo sapiens

<400> 3699

Met Ala Ala Leu Leu Arg Ser Ala Arg Trp Leu Leu Arg Ala Gly Ala  
 1 5 10 15  
 Ala Pro Arg Leu Pro Leu Ser Leu Arg Leu Leu Pro Gly Gly Pro Gly  
 20 25 30  
 Arg Leu His Ala Ala Ser Tyr Leu Pro Ala Ala Arg Ala Gly Pro Val  
 35 40 45  
 Ala Gly Gly Leu Leu Ser Pro Ala Arg Leu Tyr Ala Ile Ala Ala Lys  
 50 55 60  
 Glu Lys Asp Ile Gln Glu Glu Ser Thr Phe Ser Ser Arg Lys Ile Ser  
 65 70 75 80  
 Asn Gln Phe Asp Trp Ala Leu Met Arg Leu Asp Leu Ser Val Arg Arg  
 85 90 95  
 Thr Gly Arg Ile Pro Lys Lys Leu Leu Gln Lys Val Phe Asn Asp Thr  
 100 105 110  
 Cys Arg Ser Gly Gly Leu Gly Gly Ser His Ala Leu Leu Leu Arg  
 115 120 125  
 Ser Cys Gly Ser Leu Leu Pro Glu Leu Lys Leu Glu Glu Arg Thr Glu  
 130 135 140

Phe Ala His Arg Ile Trp Asp Thr Leu Gln Lys Leu Gly Ala Val Tyr  
 145 150 155 160  
 Asp Val Ser His Tyr Asn Ala Leu Leu Lys Val Tyr Leu Gln Asn Glu  
 165 170 175  
 Tyr Lys Phe Ser Pro Thr Asp Phe Leu Ala Lys Met Glu Glu Ala Asn  
 180 185 190  
 Ile Gln Pro Asn Arg Val Thr Tyr Gln Arg Leu Ile Ala Ser Tyr Cys  
 195 200 205  
 Asn Val Gly Asp Ile Glu Gly Ala Ser Lys Ile Leu Gly Phe Met Lys  
 210 215 220  
 Thr Lys Asp Leu Pro Val Thr Glu Ala Val Phe Ser Ala Leu Val Thr  
 225 230 235 240  
 Gly His Ala Arg Ala Gly Asp Met Glu Asn Ala Glu Asn Ile Leu Thr  
 245 250 255  
 Val Met Arg Asp Ala Gly Ile Glu Pro Gly Pro Asp Thr Tyr Leu Ala  
 260 265 270  
 Leu Leu Asn Ala Tyr Ala Glu Lys Gly Asp Ile Asp His Val Lys Gln  
 275 280 285  
 Thr Leu Glu Lys Val Glu Lys Ser Glu Leu His Leu Met Asp Arg Asp  
 290 295 300  
 Leu Leu Gln Ile Ile Phe Ser Phe Ser Lys Ala Gly Tyr Pro Gln Tyr  
 305 310 315 320  
 Val Ser Glu Ile Leu Glu Lys Val Thr Cys Glu Arg Arg Tyr Ile Pro  
 325 330 335  
 Asp Ala Met Asn Leu Ile Leu Leu Leu Val Thr Glu Lys Leu Glu Asp  
 340 345 350  
 Val Ala Leu Gln Ile Leu Leu Ala Cys Pro Val Ser Lys Glu Asp Gly  
 355 360 365  
 Pro Ser Val Phe Gly Ser Phe Phe Leu Gln His Cys Val Thr Met Asn  
 370 375 380  
 Thr Pro Val Glu Lys Leu Thr Asp Tyr Cys Lys Lys Leu Lys Glu Val  
 385 390 395 400  
 Gln Met His Ser Phe Pro Leu Gln Phe Thr Leu His Cys Ala Leu Leu  
 405 410 415  
 Ala Asn Lys Thr Asp Leu Ala Lys Ala Leu Met Lys Ala Val Lys Glu  
 420 425 430

Glu Gly Phe Pro Ile Arg Pro His Tyr Phe Trp Pro Leu Leu Val Gly  
           435                          440                          445  
 Arg Arg Lys Glu Lys Asn Val Gln Gly Ile Ile Glu Ile Leu Lys Gly  
           450                          455                          460  
 Met Gln Glu Leu Gly Val His Pro Asp Gln Glu Thr Tyr Thr Asp Tyr  
 465                          470                          475                          480  
 Val Ile Pro Cys Phe Asp Ser Val Asn Ser Ala Arg Ala Ile Leu Gln  
                           485                          490                          495  
 Glu Asn Gly Cys Leu Ser Asp Ser Asp Met Phe Ser Gln Ala Gly Leu  
                           500                          505                          510  
 Arg Ser Glu Ala Ala Asn Gly Asn Leu Asp Phe Val Leu Ser Phe Leu  
           515                          520                          525  
 Lys Ser Asn Thr Leu Pro Ile Ser Leu Gln Ser Ile Arg Ser Ser Leu  
           530                          535                          540  
 Leu Leu Gly Phe Arg Arg Ser Met Asn Ile Asn Leu Trp Ser Glu Ile  
 545                          550                          555                          560  
 Thr Glu Leu Leu Tyr Lys Asp Gly Arg Tyr Cys Gln Glu Pro Arg Gly  
                           565                          570                          575  
 Pro Thr Glu Ala Val Gly Tyr Phe Leu Tyr Asn Leu Ile Asp Ser Met  
           580                          585                          590  
 Ser Asp Ser Glu Val Gln Ala Lys Glu Glu His Leu Arg Gln Tyr Phe  
           595                          600                          605  
 His Gln Leu Glu Lys Met Asn Val Lys Ile Pro Glu Asn Ile Tyr Arg  
           610                          615                          620  
 Gly Ile Arg Asn Leu Leu Glu Ser Tyr His Val Pro Glu Leu Ile Lys  
 625                          630                          635                          640  
 Asp Ala His Leu Leu Val Glu Ser Lys Asn Leu Asp Phe Gln Lys Thr  
           645                          650                          655  
 Val Gln Leu Thr Ser Ser Glu Leu Glu Ser Thr Leu Glu Thr Leu Lys  
           660                          665                          670  
 Ala Glu Asn Arg Pro Ile Arg Asp Val Leu Lys Gln Leu Ile Leu Val  
           675                          680                          685  
 Leu Cys Ser Glu Glu Asn Met Gln Lys Ala Leu Glu Leu Arg Ala Lys  
           690                          695                          700  
 Tyr Glu Ser Asp Met Val Thr Gly Gly Tyr Ala Ala Leu Ile Asn Leu

705	710	715	720
Cys Cys Arg His Asp Lys Val Glu Asp Ala Leu Asn Leu Lys Glu Glu			
725	730	735	
Phe Asp Arg Leu Asp Ser Ser Ala Val Leu Asp Thr Gly Lys Tyr Val			
740	745	750	
Gly Leu Val Arg Val Leu Ala Lys His Gly Lys Leu Gln Asp Ala Ile			
755	760	765	
Asn Ile Leu Lys Glu Met Lys Glu Lys Asp Val Leu Ile Lys Asp Thr			
770	775	780	
Thr Ala Leu Ser Phe Phe His Met Leu Asn Gly Ala Ala Leu Arg Gly			
785	790	795	800
Glu Ile Glu Thr Val Lys Gln Leu His Glu Ala Ile Val Thr Leu Gly			
805	810	815	
Leu Ala Glu Pro Ser Thr Asn Ile Ser Phe Pro Leu Val Thr Val His			
820	825	830	
Leu Glu Lys Gly Asp Leu Ser Thr Ala Leu Glu Val Ala Ile Asp Cys			
835	840	845	
Tyr Glu Lys Tyr Lys Val Leu Pro Arg Ile His Asp Val Leu Cys Lys			
850	855	860	
Leu Val Glu Lys Gly Glu Thr Asp Leu Ile Gln Lys Ala Met Asp Phe			
865	870	875	880
Val Ser Gln Glu Gln Gly Glu Met Val Met Leu Tyr Asp Leu Phe Phe			
885	890	895	
Ala Phe Leu Gln Thr Gly Asn Tyr Lys Glu Ala Lys Lys Ile Ile Glu			
900	905	910	
Thr Pro Gly Ile Arg Ala Arg Ser Ala Arg Leu Gln Trp Phe Cys Asp			
915	920	925	
Arg Cys Val Ala Asn Asn Gln Val Glu Thr Leu Glu Lys Leu Val Glu			
930	935	940	
Leu Thr Gln Lys Leu Phe Glu Cys Asp Arg Asp Gln Met Tyr Tyr Asn			
945	950	955	960
Leu Leu Lys Leu Tyr Lys Ile Asn Gly Asp Trp Gln Arg Ala Asp Ala			
965	970	975	
Val Trp Asn Lys Ile Gln Glu Glu Asn Val Ile Pro Arg Glu Lys Thr			
980	985	990	
Leu Arg Leu Leu Ala Glu Ile Leu Arg Glu Gly Asn Gln Glu Val Pro			

995	1000	1005
Phe Asp Val Pro Glu Leu Trp Tyr Glu Asp Glu Lys His Ser Leu Asn		
1010	1015	1020
Ser Ser Ser Ala Ser Thr Thr Glu Pro Asp Phe Gln Lys Asp Ile Leu		
1025	1030	1035
Ile Ala Cys Arg Leu Asn Gln Lys Lys Gly Ala Tyr Asp Ile Phe Leu		
1045	1050	1055
Asn Ala Lys Glu Gln Asn Ile Val Phe Asn Ala Glu Thr Tyr Ser Asn		
1060	1065	1070
Leu Ile Lys Leu Leu Met Ser Glu Asp Tyr Phe Thr Gln Ala Met Glu		
1075	1080	1085
Val Lys Ala Phe Ala Glu Thr His Ile Lys Gly Phe Thr Leu Asn Asp		
1090	1095	1100
Ala Ala Asn Ser Arg Leu Ile Ile Thr Gln Val Arg Arg Asp Tyr Leu		
1105	1110	1115
Lys Glu Ala Val Thr Thr Leu Lys Thr Val Leu Asp Gln Gln Gln Thr		
1125	1130	1135
Pro Ser Arg Leu Ala Val Thr Arg Val Ile Gln Ala Leu Ala Met Lys		
1140	1145	1150
Gly Asp Val Glu Asn Ile Glu Val Val Gln Lys Met Leu Asn Gly Leu		
1155	1160	1165
Glu Asp Ser Ile Gly Leu Ser Lys Met Val Phe Ile Asn Asn Ile Ala		
1170	1175	1180
Leu Ala Gln Ile Lys Asn Asn Asp Ile Asp Ala Ala Ile Glu Asn Ile		
1185	1190	1195
Glu Asn Met Leu Thr Ser Glu Asn Lys Val Ile Glu Pro Gln Tyr Phe		
1205	1210	1215
Gly Leu Ala Tyr Leu Phe Arg Lys Val Ile Glu Glu Gln Leu Glu Pro		
1220	1225	1230
Ala Val Glu Lys Ile Ser Ile Met Ala Glu Arg Leu Ala Asn Gln Phe		
1235	1240	1245
Ala Ile Tyr Lys Pro Val Thr Asp Phe Phe Leu Gln Leu Val Asp Ala		
1250	1255	1260
Gly Lys Val Asp Asp Ala Arg Ala Leu Leu Gln Arg Cys Gly Ala Ile		
1265	1270	1275
Ala Glu Gln Thr Pro Ile Leu Leu Leu Phe Leu Leu Arg Asn Ser Arg		

1285	1290	1295
Lys Gln Gly Lys Ala Ser Thr Val	Lys Ser Val Leu Glu Leu Ile Pro	
1300	1305	1310
Glu Leu Asn Glu Lys Glu Glu Ala Tyr Asn Ser Leu Met Lys Ser Tyr		
1315	1320	1325
Val Ser Glu Lys Asp Val Thr Ser Ala Lys Ala Leu Tyr Glu His Leu		
1330	1335	1340
Thr Ala Lys Asn Thr Lys Leu Asp Asp Leu Phe Leu Lys Arg Tyr Ala		
1345	1350	1355
Ser Leu Leu Lys Tyr Ala Gly Glu Pro Val Pro Phe Ile Glu Pro Pro		
1365	1370	1375
Glu Ser Phe Glu Phe Tyr Ala Gln Gln Leu Arg Lys Leu Arg Glu Asn		
1380	1385	1390
Ser Ser		

&lt;210&gt; 3700

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3700

Met Ile Val Tyr Leu Glu Asn Leu Ile Ile Ser Ala Pro Lys Leu Leu			
1	5	10	15
Lys Leu Ile Ser Lys Phe Asp Lys Val Ser Gly Tyr Lys Ile Asn Met			
20	25	30	
Gln Lys Ser Gln Ala Phe Leu Tyr Ile Asn Asn Arg Gln Ser Glu Ser			
35	40	45	
Gln Ile Met Ser Glu Leu Pro Phe Thr Ile Ala Thr Lys Arg Ile Lys			
50	55	60	
Tyr Leu Gly Ile Gln Leu Thr Arg Asp Val Lys Asp Leu Phe Glu Glu			
65	70	75	80
Asn Tyr Glu Pro Leu Leu Lys Glu Ile Arg Glu Arg Thr Gln Thr Lys			
85	90	95	
Asn Ile Pro Leu Ser Trp Ile Gly Ile Ile Asn Ile Val Lys Met Ala			

100	105	110
Thr Leu Pro Lys Val Ile Tyr Arg Ile Asn Ala Ile Pro Ile Glu Leu		
115	120	125
Pro Leu Thr Phe Phe Thr Glu Leu Glu Lys Asn Asp Phe Lys Phe His		
130	135	140
Met Glu Pro Lys Asn Ser Ser Tyr Ser Gln Asp Asn Pro Lys Gln Lys		
145	150	155
Arg Ala Lys Leu Glu Ala Ser Cys Tyr Leu Thr Ser Asn Cys Thr Thr		
165	170	175
Val Leu Gln		

&lt;210&gt; 3701

&lt;211&gt; 731

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3701

Met Glu Arg Ser Asp Glu Glu Asn Leu Lys Glu Glu Cys Ser Ser Thr		
1	5	10
Glu Ser Thr Gln Gln Glu His Glu Asp Ala Pro Ser Thr Lys Leu Gln		
20	25	30
Gly Glu Val Leu Ala Leu Glu Glu Glu Arg Ala Gln Val Leu Gly His		
35	40	45
Val Glu Gln Leu Lys Val Arg Val Lys Glu Leu Glu Gln Gln Leu Gln		
50	55	60
Glu Ser Ala Arg Glu Ala Glu Met Glu Arg Ala Leu Leu Gln Gly Glu		
65	70	75
Arg Glu Ala Glu Arg Ala Leu Leu Gln Lys Glu Gln Lys Ala Val Asp		
85	90	95
Gln Leu Gln Glu Lys Leu Val Ala Leu Glu Thr Gly Ile Gln Lys Glu		
100	105	110
Arg Asp Lys Glu Arg Ala Glu Leu Ala Ala Gly Arg Arg His Leu Glu		
115	120	125
Ala Arg Gln Ala Leu Tyr Ala Glu Leu Gln Thr Gln Leu Asp Asn Cys		



130	135	140	
Pro Glu Ser Val Arg Glu Gln Leu Gln Glu Gln Leu Arg Arg Glu Ala			
145	150	155	160
Glu Ala Leu Glu Thr Glu Thr Lys Leu Phe Glu Asp Leu Glu Phe Gln			
	165	170	175
Gln Leu Glu Arg Glu Ser Arg Val Glu Glu Glu Arg Glu Leu Ala Gly			
	180	185	190
Gln Gly Leu Leu Arg Ser Lys Ala Glu Leu Leu Arg Ser Ile Ala Lys			
	195	200	205
Arg Lys Glu Arg Leu Ala Ile Leu Asp Ser Gln Ala Gly Gln Ile Arg			
	210	215	220
Ala Gln Ala Val Gln Glu Ser Glu Arg Leu Ala Arg Asp Lys Asn Ala			
225	230	235	240
Ser Leu Gln Leu Leu Gln Lys Glu Lys Glu Lys Leu Thr Val Leu Glu			
	245	250	255
Arg Arg Tyr His Ser Leu Thr Gly Gly Arg Pro Phe Pro Lys Thr Thr			
	260	265	270
Ser Thr Leu Lys Glu Met Glu Lys Leu Leu Leu Pro Ala Val Asp Leu			
	275	280	285
Glu Gln Trp Tyr Gln Glu Leu Met Ala Gly Leu Gly Thr Gly Pro Ala			
	290	295	300
Ala Ala Ser Pro His Ser Ser Pro Pro Pro Leu Pro Ala Lys Ala Ser			
305	310	315	320
Arg Gln Leu Gln Val Tyr Arg Ser Lys Met Asp Gly Glu Ala Thr Ser			
	325	330	335
Pro Leu Pro Arg Thr Arg Ser Gly Pro Leu Pro Ser Ser Ser Gly Ser			
	340	345	350
Ser Ser Ser Ser Ser Gln Leu Ser Val Ala Thr Leu Gly Arg Ser Pro			
	355	360	365
Ser Pro Lys Ser Ala Leu Leu Thr Gln Asn Gly Thr Gly Ser Leu Pro			
	370	375	380
Arg Asn Leu Ala Ala Thr Leu Gln Asp Ile Glu Thr Lys Arg Gln Leu			
385	390	395	400
Ala Leu Gln Gln Lys Gly Gln Gln Val Ile Glu Glu Gln Arg Arg Arg			
	405	410	415
Leu Ala Glu Leu Lys Gln Lys Ala Ala Ala Glu Ala Gln Cys Gln Trp			

420	425	430
Asp Ala Leu His Gly Ala Ala	Pro Phe Pro Ala Gly Pro	Ser Gly Phe
435	440	445
Pro Pro Leu Met His His Ser	Ile Leu His His Leu Pro	Ala Gly Arg
450	455	460
Glu Arg Gly Glu Glu Gly Glu	His Ala Tyr Asp Thr Leu	Ser Leu Glu
465	470	475
Ser Ser Asp Ser Met Glu Thr	Ser Ile Ser Thr Gly Gly	Asn Ser Ala
485	490	495
Cys Ser Pro Asp Asn Met Ser	Ser Val Ser Gly Leu Asp	Met Gly Lys
500	505	510
Ile Glu Glu Met Glu Lys Met	Leu Lys Glu Ala His Ala	Glu Lys Asn
515	520	525
Arg Leu Met Glu Ser Arg Glu	Arg Glu Met Glu Leu Arg	Arg Gln Ala
530	535	540
Leu Glu Glu Glu Arg Arg Arg	Arg Glu Gln Val Glu Arg	Arg Leu Gln
545	550	555
Ser Glu Ser Ala Arg Arg Gln	Gln Leu Val Glu Lys Glu	Val Lys Met
565	570	575
Arg Glu Lys Gln Phe Ser Gln	Ala Arg Pro Leu Thr Arg	Tyr Leu Pro
580	585	590
Ile Arg Lys Glu Asp Phe Asp	Leu Lys Thr His Ile Glu	Ser Ser Gly
595	600	605
His Gly Val Asp Thr Cys Leu	His Val Val Leu Ser Ser	Lys Val Cys
610	615	620
Arg Gly Tyr Leu Val Lys Met	Gly Gly Lys Ile Lys Ser	Trp Lys Lys
625	630	635
Arg Trp Phe Val Phe Asp Arg	Leu Lys Arg Thr Leu Ser	Tyr Tyr Val
645	650	655
Asp Lys His Glu Thr Lys Leu	Lys Gly Val Ile Tyr Phe	Gln Ala Ile
660	665	670
Glu Glu Val Tyr Tyr Asp His	Leu Arg Ser Ala Ala Lys	Ser Pro Asn
675	680	685
Pro Ala Leu Thr Phe Cys Val	Lys Thr His Asp Arg Leu	Tyr Tyr Met
690	695	700
Val Ala Pro Ser Ala Glu Ala	Met Arg Ile Trp Met Asp	Val Ile Val

705                      710                      715                      720  
 Thr Gly Ala Glu Gly Tyr Thr Gln Phe Met Asn  
                          725                      730

<210> 3702

<211> 341

<212> PRT

<213> Homo sapiens

<400> 3702

Met Leu Asn Thr Ser Val Pro Asn Asp Met Asp Glu Gln Gln Asn Ala  
   1                  5                  10                  15  
 Arg Glu Ser Leu Glu Asp Gln Asn Leu Lys Asp Gln Asp His Leu Tyr  
                   20                  25                  30  
 Glu Glu Glu Ile Gly Ala Val Gly Gly Ile Asp Tyr Asn Asp Thr Asn  
                   35                  40                  45  
 Gln Asn Ala Gln Ser Glu Gln Asn Gly Ser Ser Asp Leu Leu Cys Asp  
                   50                  55                  60  
 Leu Asn Thr Ser Ser Tyr Asp Thr Ser Ala Leu Cys Asn Gly Phe Pro  
   65                  70                  75                  80  
 Leu Glu Asn Ile Cys Thr Gln Val Ile Asp Gln Asn Gln Asn Leu His  
                   85                  90                  95  
 Gly Asp Ser Lys Gln Ser Asn Leu Thr Asn Gly Asp Tyr Val Ala Ser  
                   100                  105                  110  
 Ser Asp Gly Thr Ser Lys Pro Ser Ser Ser Leu Ala Val Ala Ala Gln  
                   115                  120                  125  
 Leu Arg Glu Ile Ile Pro Ser Ser Ala Leu Pro Asn Gly Thr Val Gln  
                   130                  135                  140  
 His Ile Leu Met Pro Asp Asp Glu Gly Glu Gly Glu Leu Cys Trp Lys  
   145                  150                  155                  160  
 Lys Val Asp Leu Gly Asp Val Lys Asn Val Asp Val Leu Ser Phe Ser  
                   165                  170                  175  
 His Ala Pro Ser Phe Asn Phe Leu Ser Asn Ser Cys Trp Ser Lys Pro  
                   180                  185                  190  
 Lys Glu Asp Lys Ala Val Asp Thr Ser Asp Leu Glu Val Ala Glu Asp

195	200	205
Pro Met Gly Leu Gln Gly Ile Asp Leu Ile Thr Ala Ala Leu Leu Phe		
210	215	220
Cys Leu Gly Asp Ser Pro Gly Gly Arg Gly Ile Ser Asp Ser Arg Met		
225	230	235
Ala Asp Ile Tyr His Ile Asp Val Gly Thr Gln Thr Phe Ser Leu Pro		
	245	250
Ser Ala Ile Leu Ala Thr Ser Thr Met Val Gly Glu Ile Ala Ser Ala		
	260	265
Ser Ala Cys Asp His Ala Asn Pro Gln Leu Ser Asn Pro Ser Pro Phe		
	275	280
Gln Thr Leu Gly Leu Asp Leu Val Leu Glu Cys Val Ala Arg Tyr Gln		
	290	295
Pro Lys Gln Arg Ser Met Phe Thr Phe Val Cys Gly Gln Leu Phe Arg		
305	310	315
Arg Lys Glu Phe Ser Ser His Phe Lys Asn Val His Gly Asp Ile His		
	325	330
Ala Gly Leu Asn Gly		335
	340	

&lt;210&gt; 3703

&lt;211&gt; 230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3703

Met Phe Leu Gln Cys Met Leu Val Cys Met Leu Leu Ser Ile Phe Gln
1 5 10 15
Ile Ile Tyr Leu Met Tyr Ile Ile Arg Ser Glu Ile Ala Asp Gln Lys
20 25 30
Ala Cys Ile Phe Leu Lys Ala Arg Asp Ser Tyr Gly Gln Leu Ala Pro
35 40 45
Arg Lys Val Pro Val Phe Ser Thr Gly Phe Ser Met Ser Arg Gly Ala
50 55 60
Glu Ile Ile Val Gly Ala Gly Cys Arg Val Trp Arg Val Gln Phe Val

65                      70                      75                      80  
 Leu Ala Val Gly Phe Val Glu Val Val Leu Trp Lys Thr Tyr Arg Gln  
                             85                      90                      95  
 Met Pro Ser Phe Pro Ser Leu Ser Gln Glu Glu Ala Thr Trp Gln Glu  
                             100                      105                      110  
 Gln Glu Ala Pro Arg Arg Asp Thr Pro Thr Glu Ser Ser Cys Ala Val  
                             115                      120                      125  
 Ala Ala Ile Gly Thr Leu Glu Gly Ser Pro Pro Gly Ile Ser Thr Ser  
                             130                      135                      140  
 Phe Phe Arg Lys Val Leu Gly Trp Pro Leu Arg Leu Pro Arg Asp Leu  
 145                      150                      155                      160  
 Cys Asn Trp Met Gln Gly Leu Leu Gln Ala Ala Gly Leu His Ile Arg  
                             165                      170                      175  
 Asp Asn Ala Tyr Asn Tyr Cys Tyr Met Tyr Glu Leu Leu Ser Leu Gly  
                             180                      185                      190  
 Leu Pro Leu Leu Trp Ala Phe Ser Glu Val Leu Ala Ala Met Tyr Arg  
                             195                      200                      205  
 Glu Ser Glu Gly Ser Leu Glu Ser Ile Cys Asn Trp Val Leu Arg Cys  
                             210                      215                      220  
 Phe Pro Val Lys Leu Arg  
 225                      230

<210> 3704

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3704

Met Val Gln Gly Met Cys Ser Pro Ser Pro Phe Gly Thr Ser Arg Ala  
   1                      5                      10                      15  
 Cys Thr Val Gly Thr Gln Val Asp Ser Arg Ser Leu Pro Trp Ala Leu  
                             20                      25                      30  
 Gly Ala Ser Ala Gln Arg Gly Asn Ile Pro Thr Ala Thr Cys Ala Arg  
                             35                      40                      45  
 Thr Ala Gly Thr Leu Arg Arg Gly Leu Gln Pro Gly Trp Gly Trp Glu

50                      55                      60  
 Asp Phe Leu Asp Glu Gly Gln Pro Gly Phe Ser Ser Arg Met Ser Trp  
 65                      70                      75                      80  
 Ser Arg Pro Pro Ala Gln Glu Gln Gly Ala Gly Arg Gly Pro Ser Trp  
                     85                      90                      95  
 Val Arg Gly Leu Gly Gln Pro Thr Ala Ala Phe Glu Gln Gly Pro Arg  
                     100                      105                      110  
 Ser Ser Val Ser Pro Gln Trp Glu Gly Gly Gly Gln Gly Pro Gly Glu  
                     115                      120                      125  
 Leu Gly Arg Lys His Leu Leu Gly Pro Ser Gln His His Pro Thr Asp

130                      135                      140  
 Arg His  
 145

<210> 3705

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3705

Met His Ser Met Asp Pro Gln Leu Glu Arg Gln Met Glu Thr Thr Gln  
 1                      5                      10                      15  
 Asn Leu Val Asp Ser Tyr Met Ala Ile Val Asn Lys Thr Val Trp Asn  
                     20                      25                      30  
 Leu Met Val Gly Ala Lys Pro Lys Thr Ile Met His Ile Met Ile Tyr  
                     35                      40                      45  
 Asn Val His Ala Pro Pro His Gly Asp Gln Gly Val His Leu Leu Gly  
                     50                      55                      60  
 Ala Ala Val Gln Pro Ala Leu Ala Trp Glu Arg Glu Asp Thr His Gly  
 65                      70                      75                      80  
 Gly Val Gly Arg Ala Gly Thr Ala Ala Arg Arg Asp Ala Ala Ser Gln  
                     85                      90                      95  
 Ser Cys Cys Pro Thr Cys Thr Arg Val Gly Thr Arg Arg His Ser Trp  
                     100                      105                      110

Arg Ser Arg Gln Ser Arg His Ser Gly Ala Thr Arg Leu Ala Trp Glu  
 115 120 125  
 Glu Ile Asp Thr Pro Gly Gly Val Gly Arg Ala Gly Thr Ala Ala Arg  
 130 135 140  
 Arg Asp Ser Arg Gly Asn Glu Lys Thr Leu Leu Glu Ala Ser Ala Glu  
 145 150 155 160  
 Gln Ala Asp Gln Gly Val His Leu Leu Gly Ala Ala Val Gln Pro Ala  
 165 170 175  
 Leu Ala

<210> 3706

<211> 736

<212> PRT

<213> Homo sapiens

<400> 3706

Met Tyr Arg Glu Met Lys Asp Ser Asp Lys Glu Lys Glu Asn Gly Lys  
 1 5 10 15  
 Met Gly Cys Trp Ser Ile Glu His Val Glu Gln Tyr Leu Gly Thr Asp  
 20 25 30  
 Glu Leu Pro Lys Asn Asp Leu Ile Thr Tyr Leu Gln Lys Asn Ala Asp  
 35 40 45  
 Ala Ala Phe Leu Arg His Trp Lys Leu Thr Gly Thr Asn Lys Ser Ile  
 50 55 60  
 Arg Lys Asn Arg Asn Cys Ser Gln Leu Ile Ala Ala Tyr Lys Asp Phe  
 65 70 75 80  
 Cys Glu His Gly Thr Lys Ser Gly Leu Asn Gln Gly Ala Ile Ser Thr  
 85 90 95  
 Leu Gln Ser Ser Asp Ile Leu Asn Leu Thr Lys Glu Gln Pro Gln Ala  
 100 105 110  
 Lys Ala Gly Asn Gly Gln Asn Ser Cys Gly Val Glu Asp Val Leu Gln  
 115 120 125  
 Leu Leu Arg Ile Leu Tyr Ile Val Ala Ser Asp Pro Tyr Ser Arg Ile  
 130 135 140

Ser Gln Glu Asp Gly Asp Glu Gln Pro Gln Phe Thr Phe Pro Pro Asp  
 145 150 155 160  
 Glu Phe Thr Ser Lys Lys Ile Thr Thr Lys Ile Leu Gln Gln Ile Glu  
 165 170 175  
 Glu Pro Leu Ala Leu Ala Ser Gly Ala Leu Pro Asp Trp Cys Glu Gln  
 180 185 190  
 Leu Thr Ser Lys Cys Pro Phe Leu Ile Pro Phe Glu Thr Arg Gln Leu  
 195 200 205  
 Tyr Phe Thr Cys Thr Ala Phe Gly Ala Ser Arg Ala Ile Val Trp Leu  
 210 215 220  
 Gln Asn Arg Arg Glu Ala Thr Val Glu Arg Thr Arg Thr Thr Ser Ser  
 225 230 235 240  
 Val Arg Arg Asp Asp Pro Gly Glu Phe Arg Val Gly Arg Leu Lys His  
 245 250 255  
 Glu Arg Val Lys Val Pro Arg Gly Glu Ser Leu Met Glu Trp Ala Glu  
 260 265 270  
 Asn Val Met Gln Ile His Ala Asp Arg Lys Ser Val Leu Glu Val Glu  
 275 280 285  
 Phe Leu Gly Glu Glu Gly Thr Gly Leu Gly Pro Thr Leu Glu Phe Tyr  
 290 295 300  
 Ala Leu Val Ala Ala Glu Phe Gln Arg Thr Asp Leu Gly Ala Trp Leu  
 305 310 315 320  
 Cys Asp Asp Asn Phe Pro Asp Asp Glu Ser Arg His Val Asp Leu Gly  
 325 330 335  
 Gly Gly Leu Lys Pro Pro Gly Tyr Tyr Val Gln Arg Ser Cys Gly Leu  
 340 345 350  
 Phe Thr Ala Pro Phe Pro Gln Asp Ser Asp Glu Leu Glu Arg Ile Thr  
 355 360 365  
 Lys Leu Phe His Phe Leu Gly Ile Phe Leu Ala Lys Cys Ile Gln Asp  
 370 375 380  
 Asn Arg Leu Val Asp Leu Pro Ile Ser Lys Pro Phe Phe Lys Leu Met  
 385 390 395 400  
 Cys Met Gly Asp Ile Lys Ser Asn Met Ser Lys Leu Ile Tyr Glu Ser  
 405 410 415  
 Arg Gly Asp Arg Asp Leu His Cys Thr Glu Ser Gln Ser Glu Ala Ser



420	425	430	
Thr Glu Glu Gly His Asp Ser Leu Ser Val Gly Ser Leu Glu Glu Asp			
435	440	445	
Ser Lys Ser Glu Phe Ile Leu Asp Pro Pro Lys Pro Lys Pro Pro Ala			
450	455	460	
Trp Phe Asn Gly Ile Leu Thr Trp Glu Asp Phe Glu Leu Val Asn Pro			
465	470	475	480
His Arg Ala Arg Phe Leu Lys Glu Ile Lys Asp Leu Ala Ile Lys Arg			
485	490	495	
Arg Gln Ile Leu Ser Asn Lys Gly Leu Ser Glu Asp Glu Lys Asn Thr			
500	505	510	
Lys Leu Gln Glu Leu Val Leu Lys Asn Pro Ser Gly Ser Gly Pro Pro			
515	520	525	
Leu Ser Ile Glu Asp Leu Gly Leu Asn Phe Gln Phe Cys Pro Ser Ser			
530	535	540	
Arg Ile Tyr Gly Phe Thr Ala Val Asp Leu Lys Pro Ser Gly Glu Asp			
545	550	555	560
Glu Met Ile Thr Met Asp Asn Ala Glu Glu Tyr Val Asp Leu Met Phe			
565	570	575	
Asp Phe Cys Met His Thr Gly Ile Gln Lys Gln Met Glu Ala Phe Arg			
580	585	590	
Asp Gly Phe Asn Lys Val Phe Pro Met Glu Lys Leu Ser Ser Phe Ser			
595	600	605	
His Glu Glu Val Gln Met Ile Leu Cys Gly Asn Gln Ser Pro Ser Trp			
610	615	620	
Ala Ala Glu Asp Ile Ile Asn Tyr Thr Glu Pro Lys Leu Gly Tyr Thr			
625	630	635	640
Arg Asp Ser Pro Gly Phe Leu Arg Phe Val Arg Val Leu Cys Gly Met			
645	650	655	
Ser Ser Asp Glu Arg Lys Ala Phe Leu Gln Phe Thr Thr Gly Cys Ser			
660	665	670	
Thr Leu Pro Pro Gly Gly Leu Ala Asn Leu His Pro Arg Leu Thr Val			
675	680	685	
Val Arg Lys Val Asp Ala Thr Asp Ala Ser Tyr Pro Ser Val Asn Thr			
690	695	700	
Cys Val His Tyr Leu Lys Leu Pro Glu Tyr Ser Ser Glu Glu Ile Met			

705                      710                      715                      720  
 Arg Glu Arg Leu Leu Ala Ala Thr Met Glu Lys Gly Phe His Leu Asn  
                          725                      730                      735

<210> 3707

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3707

Met Pro Leu Leu Ala Phe Pro Gly Pro Ala Pro Ala Cys Trp Arg Pro  
   1                  5                  10                  15  
 Leu Asp Val Gln Pro Leu Pro Gln Gln Trp Ala Leu His Ala His Leu  
                   20                  25                  30  
 Leu Pro Gly Arg Gly Leu Phe Gly Pro Gly Ser Arg Leu Gly Ala Ala  
                   35                  40                  45  
 Pro Ala Gly Pro Ala Pro Ala Ser Arg Pro Ser Gly Gly Gln Ala His  
                   50                  55                  60  
 Ala Ser Gly Gln Pro Leu Pro Ala Trp Arg Leu Leu Leu Cys Met Gly  
   65                  70                  75                  80  
 Ser Arg Pro Trp Thr Ser Ser Ser Arg Pro Leu Gln Ala Gln Leu Phe  
                   85                  90                  95  
 Leu Pro Ala Ala Ser Ala Gly Pro Asp Cys Arg Gln Val Gly Leu Ser  
                   100                  105                  110  
 Arg Asp Ser Ser Phe Leu Pro Ala Ala Ser Val Gly Pro Asp Cys His  
                   115                  120                  125  
 Gln Val Gly Leu Ser Lys Asp Ser Ser Cys Leu Pro Val Ala Ser Val  
                   130                  135                  140  
 Gly Pro Ser Arg Pro Gln Val Cys Leu Pro Arg Pro Ser Ser Gly Leu  
   145                  150                  155                  160  
 Ser Ala Ala Ser Pro Gly Ala Lys Val Pro Arg Val Arg Leu Ser Arg  
                   165                  170                  175  
 Leu Ser Ser Ser Cys Leu Pro Val Ala Ser Phe Ser Pro Ala Gln Leu  
                   180                  185                  190  
 Met Pro Pro Gly Gly Leu Pro Arg Pro Cys Phe

195

200

&lt;210&gt; 3708

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3708

Met Gly Leu Gln Phe Ser Gln Val Ile Ser Ile Cys Trp Ala Ala Met  
 1 5 10 15  
 Gly Ser Leu Tyr Ala Glu Met Thr Glu Asn Lys Tyr Val Cys Phe Ser  
 20 25 30  
 Ala Leu Thr Ile Leu Ser Glu Trp Gln Glu Trp Glu Gly Ala Arg Gly  
 35 40 45  
 Ser Gly Glu Leu Trp Asn Pro Glu Met Trp Gln Gly Val Ala Arg Glu  
 50 55 60  
 Gly Tyr Trp Gly Ser Trp Gly Ala Leu Ser Pro Ala Gln Cys Ser Thr  
 65 70 75 80  
 Glu Pro Cys Ser Ser Thr Ala Cys Pro Trp Ser Phe Trp Pro Ser Ser  
 85 90 95  
 Thr Gly Arg Ser Thr Thr Glu Ala Trp Gly Val Gly Thr Gly Leu Arg  
 100 105 110  
 Arg Gly Lys Gln Lys Ala Ala Ser Gly Val Leu Ile Lys Leu Leu Phe  
 115 120 125  
 Ile Ser Thr Cys Gln Leu Leu His Gly Ala Arg Gly Arg Arg Leu Glu  
 130 135 140  
 Thr Arg Glu Glu Ser Arg Ser Arg Gln Met Leu Asp Pro Arg Gly Leu  
 145 150 155 160  
 Gln Ala Trp Pro Ala Ala Thr Leu Val Asp Leu Ala Leu Gly Leu Gly  
 165 170 175  
 Ser

&lt;210&gt; 3709

&lt;211&gt; 509

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3709

Met Glu Leu Lys Lys Ser Pro Asp Gly Gly Trp Gly Trp Val Ile Val  
 1 5 10 15  
 Phe Val Ser Phe Leu Thr Gln Phe Leu Cys Tyr Gly Ser Pro Leu Ala  
 20 25 30  
 Val Gly Val Leu Tyr Ile Glu Trp Leu Asp Ala Phe Gly Glu Gly Lys  
 35 40 45  
 Gly Lys Thr Ala Trp Val Gly Ser Leu Ala Ser Gly Val Gly Leu Leu  
 50 55 60  
 Ala Ser Pro Val Cys Ser Leu Cys Val Ser Ser Phe Gly Ala Arg Pro  
 65 70 75 80  
 Val Thr Ile Phe Ser Gly Phe Met Val Ala Gly Gly Leu Met Leu Ser  
 85 90 95  
 Ser Phe Ala Pro Asn Ile Tyr Phe Leu Phe Phe Ser Tyr Gly Ile Val  
 100 105 110  
 Val Gly Leu Gly Cys Gly Leu Leu Tyr Thr Ala Thr Val Thr Ile Thr  
 115 120 125  
 Cys Gln Tyr Phe Asp Asp Arg Arg Gly Leu Ala Leu Gly Leu Ile Ser  
 130 135 140  
 Thr Gly Ser Ser Val Gly Leu Phe Ile Tyr Ala Ala Leu Gln Arg Met  
 145 150 155 160  
 Leu Val Glu Phe Tyr Gly Leu Asp Gly Cys Leu Leu Ile Val Gly Ala  
 165 170 175  
 Leu Ala Leu Asn Ile Leu Ala Cys Gly Ser Leu Met Arg Pro Leu Gln  
 180 185 190  
 Ser Ser Asp Cys Pro Leu Pro Lys Lys Ile Ala Pro Glu Asp Leu Pro  
 195 200 205  
 Asp Lys Tyr Ser Ile Tyr Asn Glu Lys Gly Lys Asn Leu Glu Glu Asn  
 210 215 220  
 Ile Asn Ile Leu Asp Lys Ser Tyr Ser Ser Glu Glu Lys Cys Arg Ile  
 225 230 235 240  
 Thr Leu Ala Asn Gly Asp Trp Lys Gln Asp Ser Leu Leu His Lys Asn

	245		250		255
Pro Thr Val Thr His Thr Lys Glu Pro Glu Thr Tyr Lys Lys Lys Val					
	260		265		270
Ala Glu Gln Thr Tyr Phe Cys Lys Gln Leu Ala Lys Arg Lys Trp Gln					
	275		280		285
Leu Tyr Lys Asn Tyr Cys Gly Glu Thr Val Ala Leu Phe Lys Asn Lys					
	290		295		300
Val Phe Ser Ala Leu Phe Ile Ala Ile Leu Leu Phe Asp Ile Gly Gly					
305		310		315	320
Phe Pro Pro Ser Leu Leu Met Glu Asp Val Ala Arg Ser Ser Asn Val					
	325		330		335
Lys Glu Glu Glu Phe Ile Met Pro Leu Ile Ser Ile Ile Gly Ile Met					
	340		345		350
Thr Ala Val Gly Lys Leu Leu Leu Gly Ile Leu Ala Asp Phe Lys Trp					
	355		360		365
Ile Asn Thr Leu Tyr Leu Tyr Val Ala Thr Leu Ile Ile Met Gly Leu					
	370		375		380
Ala Leu Cys Ala Ile Pro Phe Ala Lys Ser Tyr Val Thr Leu Ala Leu					
385		390		395	400
Leu Ser Gly Ile Leu Gly Phe Leu Thr Gly Asn Trp Ser Ile Phe Pro					
	405		410		415
Tyr Val Thr Thr Lys Thr Val Gly Ile Glu Lys Leu Ala His Ala Tyr					
	420		425		430
Gly Ile Leu Met Phe Phe Ala Gly Leu Gly Asn Ser Leu Gly Pro Pro					
	435		440		445
Ile Val Gly Trp Phe Tyr Asp Trp Thr Gln Thr Tyr Asp Ile Ala Phe					
	450		455		460
Tyr Phe Ser Gly Phe Cys Val Leu Leu Gly Gly Phe Ile Leu Leu Leu					
465		470		475	480
Ala Ala Leu Pro Ser Trp Asp Thr Cys Asn Lys Gln Leu Pro Lys Pro					
	485		490		495
Ala Pro Thr Thr Phe Leu Tyr Lys Val Ala Ser Asn Val					
	500		505		

&lt;211&gt; 672

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3710

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Met Val Val Ser Ala Gly Pro Trp Ser Ser Glu Lys Ala Glu Met Asn
  1             5             10             15
Ile Leu Glu Ile Asn Glu Lys Leu Arg Pro Gln Leu Ala Glu Asn Lys
      20             25             30
Gln Gln Phe Arg Asn Leu Lys Glu Lys Cys Phe Val Thr Gln Leu Ala
      35             40             45
Gly Phe Leu Ala Asn Arg Gln Lys Lys Tyr Lys Tyr Glu Glu Cys Lys
      50             55             60
Asp Leu Ile Lys Ser Met Leu Arg Asn Glu Arg Gln Phe Lys Glu Glu
      65             70             75             80
Met Leu Ala Glu Gln Leu Lys Gln Ala Glu Glu Leu Arg Gln Tyr Lys
      85             90             95
Val Leu Val His Ser Gln Glu Arg Glu Leu Thr Gln Leu Arg Glu Lys
      100            105            110
Leu Arg Glu Gly Arg Asp Ala Ser Arg Ser Leu Asn Gln His Leu Gln
      115            120            125
Ala Leu Leu Thr Pro Asp Glu Pro Glu Lys Ser Gln Gly Gln Asp Leu
      130            135            140
Gln Glu Gln Leu Ala Glu Gly Cys Arg Leu Ala Gln His Leu Val Gln
      145            150            155            160
Lys Leu Ser Pro Glu Asn Asp Asn Asp Asp Asp Glu Asp Val Gln Val
      165            170            175
Glu Val Ala Glu Lys Val Gln Lys Ser Ser Ala Pro Arg Glu Met Gln
      180            185            190
Lys Ala Glu Glu Lys Glu Val Pro Glu Asp Ser Leu Glu Glu Cys Ala
      195            200            205
Ile Thr Cys Ser Asn Ser His Gly Pro Tyr Asp Ser Asn Gln Pro His
      210            215            220
Arg Lys Thr Lys Ile Thr Phe Glu Glu Asp Lys Val Asp Ser Thr Leu
      225            230            235            240
Ile Gly Ser Ser Pro His Val Glu Trp Glu Asp Ala Val His Ile Ile

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	245		250		255										
Pro	Glu	Asn	Glu	Ser	Asp	Asp	Glu	Glu	Glu	Glu	Glu	Lys	Gly	Pro	Val
	260		265		270										
Ser	Pro	Arg	Asn	Leu	Gln	Glu	Ser	Glu	Glu	Glu	Glu	Val	Pro	Gln	Glu
	275		280		285										
Ser	Trp	Asp	Glu	Gly	Tyr	Ser	Thr	Leu	Ser	Ile	Pro	Pro	Glu	Met	Leu
	290		295		300										
Ala	Ser	Tyr	Lys	Ser	Tyr	Ser	Ser	Thr	Phe	His	Ser	Leu	Glu	Glu	Gln
305			310		315										
Gln	Val	Cys	Met	Ala	Val	Asp	Ile	Gly	Arg	Tyr	Arg	Trp	Asp	Gln	Val
	325		330		335										
Lys	Lys	Glu	Asp	Gln	Glu	Ala	Thr	Gly	Pro	Arg	Leu	Ser	Arg	Glu	Leu
	340		345		350										
Leu	Asp	Glu	Lys	Glu	Pro	Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys
	355		360		365										
Tyr	Ser	Thr	Pro	Ser	Gly	Cys	Leu	Glu	Leu	Thr	Asp	Ser	Cys	Gln	Pro
	370		375		380										
Tyr	Arg	Ser	Ala	Phe	Tyr	Val	Leu	Glu	Gln	Gln	Arg	Val	Gly	Leu	Ala
385			390		395										
Val	Asp	Met	Asp	Glu	Ile	Glu	Lys	Tyr	Gln	Glu	Val	Glu	Glu	Asp	Gln
	405		410		415										
Asp	Pro	Ser	Cys	Pro	Arg	Leu	Ser	Arg	Glu	Leu	Leu	Asp	Glu	Lys	Glu
	420		425		430										
Pro	Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	His	Ser	Thr	Pro	Ser
	435		440		445										
Gly	Tyr	Leu	Glu	Leu	Pro	Asp	Leu	Gly	Gln	Pro	Tyr	Ser	Ser	Ala	Val
	450		455		460										
Tyr	Ser	Leu	Glu	Glu	Gln	Tyr	Leu	Gly	Leu	Ala	Leu	Asp	Met	Asp	Arg
465			470		475										
Ile	Lys	Lys	Asp	Gln	Glu	Glu	Glu	Glu	Asp	Gln	Gly	Pro	Pro	Cys	Pro
	485		490		495										
Arg	Leu	Ser	Arg	Glu	Leu	Leu	Glu	Val	Val	Glu	Pro	Glu	Val	Leu	Gln
	500		505		510										
Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Ser	Cys	Leu	Glu	Gln
	515		520		525										
Pro	Asp	Ser	Cys	Gln	Pro	Tyr	Gly	Ser	Ser	Phe	Tyr	Ala	Leu	Glu	Glu

530	535	540	
Lys His Val Gly Phe Ser Leu Asp Val Gly Glu Ile Glu Lys Lys Gly			
545	550	555	560
Lys Gly Lys Lys Arg Arg Gly Arg Arg Ser Lys Lys Lys Arg Arg Arg			
	565	570	575
Arg Gly Arg Lys Glu Gly Glu Glu Asp Gln Asn Pro Pro Cys Pro Arg			
	580	585	590
Leu Asn Gly Val Leu Met Glu Val Glu Glu Pro Glu Val Leu Gln Asp			
	595	600	605
Ser Leu Asp Arg Cys Tyr Ser Thr Pro Leu Met Tyr Phe Glu Leu Pro			
610	615	620	
Asp Ser Phe Gln His Tyr Arg Ser Val Phe Tyr Ser Phe Glu Glu Gln			
625	630	635	640
His Ile Ser Phe Ala Leu Tyr Val Asp Asn Arg Phe Phe Thr Leu Thr			
	645	650	655
Val Thr Ser Leu His Leu Val Phe Gln Met Gly Val Ile Phe Pro Gln			
	660	665	670

&lt;210&gt; 3711

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3711

Met Leu Asn Ser Leu Met Lys Arg Asp Leu Glu Lys His Leu Asn Val			
1	5	10	15
Ser Lys Lys Phe His Gln Val Ser Ile Leu Leu Gly Ile Glu Leu Leu			
	20	25	30
Tyr Gln Val Asn Phe Ser Arg Glu Ala Leu Gln Glu Arg Arg Ala Arg			
	35	40	45
Cys Glu Thr Gln Asn Ile Asp Pro Val Val Trp Thr Asn Gln Arg Val			
	50	55	60
Leu Lys Trp Val Arg Asp Ile Asp Leu Lys Glu Tyr Ala Asp Asn Leu			
65	70	75	80
Thr Asn Ser Gly Val His Gly Ala Val Leu Val Leu Glu Pro Thr Phe			



	85	90	95
Asn Ala Glu Ala Met Ala Thr Ala Leu Gly Ile Pro Ser Gly Lys His			
	100	105	110
Ile Leu Arg Arg His Leu Ala Glu Glu Met Ser Ala Val Phe His Pro			
	115	120	125
Ala Asn Ser Thr Gly Ile Arg Glu Ala Glu Arg Phe Gly Thr Pro Pro			
	130	135	140
Gly Arg Ala Ser Ser Val Thr Arg Thr Gly Lys Glu Glu Asn Ser Ser			
145	150	155	160
Gly Leu Lys Tyr Lys Ala Gly Arg Leu Pro Leu Gly Lys Ile Gly Arg			
	165	170	175
Gly Phe Ser Ser Lys Asp Pro Asp Phe His Asp Asp Tyr Gly Ser Leu			
	180	185	190
Gln Asn Glu Asp Cys Gly Asp Asp Asp Pro Gln Ser Arg Leu Glu Gln			
	195	200	205
Cys Arg Leu Glu Gly Tyr Asn Ser Leu Glu Val Thr Asn Val			
	210	215	220

&lt;210&gt; 3712

&lt;211&gt; 575

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3712

Met Tyr Ala Gly Asn Ile Pro Ile Tyr Lys Thr Glu Ser Arg Ser Arg			
1	5	10	15
Asn Glu Gln Gly Met Asp Pro Ile Thr Arg Gln Val Gly Gln His Ile			
	20	25	30
Glu Met Glu Pro Glu Trp Glu Ala Ala Phe Thr Leu Gln Met Lys Leu			
	35	40	45
Thr His Val Ile Ser Met Met Gln Asp Trp Cys Ala Ser Asp Glu Lys			
	50	55	60
Val Leu Ile Glu Ala Tyr Lys Lys Cys Leu Ala Val Leu Met Gln Cys			
	65	70	75
His Gly Gly Tyr Thr Asp Gly Glu Gln Pro Ile Thr Leu Ser Ile Cys			

85	90	95
Gly His Ser Val Glu Thr Ile Arg Tyr Cys Val Ser Gln Glu Lys Val		
100	105	110
Ser Ile His Leu Pro Val Ser Arg Leu Leu Ala Gly Leu His Val Leu		
115	120	125
Leu Ser Lys Ser Glu Val Ala Tyr Lys Phe Pro Glu Leu Leu Pro Leu		
130	135	140
Ser Glu Leu Ser Pro Pro Met Leu Ile Glu His Pro Leu Arg Cys Leu		
145	150	155
Val Leu Cys Ala Gln Val His Ala Gly Met Trp Arg Arg Asn Gly Phe		
165	170	175
Ser Leu Val Asn Gln Ile Tyr Tyr Tyr His Asn Val Lys Cys Arg Arg		
180	185	190
Glu Met Phe Asp Lys Asp Val Val Met Leu Gln Thr Gly Val Ser Met		
195	200	205
Met Asp Pro Asn His Phe Leu Met Ile Met Leu Ser Arg Phe Glu Leu		
210	215	220
Tyr Gln Ile Phe Ser Thr Pro Asp Tyr Gly Lys Arg Phe Ser Ser Glu		
225	230	235
Ile Thr His Lys Asp Val Val Gln Gln Asn Asn Thr Leu Ile Glu Glu		
245	250	255
Met Leu Tyr Leu Ile Ile Met Leu Val Gly Glu Arg Phe Ser Pro Gly		
260	265	270
Val Gly Gln Val Asn Ala Thr Asp Glu Ile Lys Arg Glu Ile Ile His		
275	280	285
Gln Leu Ser Ile Lys Pro Met Ala His Ser Glu Leu Val Lys Ser Leu		
290	295	300
Pro Glu Asp Glu Asn Lys Glu Thr Gly Met Glu Ser Val Ile Glu Ala		
305	310	315
Val Ala His Phe Lys Lys Pro Gly Leu Thr Gly Arg Gly Met Tyr Glu		
325	330	335
Leu Lys Pro Glu Cys Ala Lys Glu Phe Asn Leu Tyr Phe Tyr His Phe		
340	345	350
Ser Arg Ala Glu Gln Ser Lys Ala Glu Glu Ala Gln Arg Lys Leu Arg		
355	360	365

Arg Gln Asn Arg Glu Asp Thr Ala Leu Pro Pro Pro Val Leu Pro Pro  
 370 375 380  
 Phe Cys Pro Leu Phe Ala Ser Leu Val Asn Ile Leu Gln Ser Asp Val  
 385 390 395 400  
 Met Leu Cys Ile Met Gly Thr Ile Leu Gln Trp Ala Val Glu His Asn  
 405 410 415  
 Gly Tyr Ala Trp Ser Glu Ser Met Leu Gln Arg Val Leu His Leu Ile  
 420 425 430  
 Gly Met Ala Leu Gln Glu Glu Lys Gln His Leu Glu Asn Val Thr Glu  
 435 440 445  
 Glu His Val Val Thr Phe Thr Phe Thr Gln Lys Ile Ser Lys Pro Gly  
 450 455 460  
 Glu Ala Pro Lys Asn Ser Pro Ser Ile Leu Ala Met Leu Glu Thr Leu  
 465 470 475 480  
 Gln Asn Ala Pro Tyr Leu Glu Val His Lys Asp Met Ile Arg Trp Ile  
 485 490 495  
 Leu Lys Thr Phe Asn Ala Val Lys Lys Met Arg Glu Ser Ser Pro Thr  
 500 505 510  
 Ser Pro Val Ala Glu Thr Glu Gly Thr Ile Met Glu Glu His Asn Phe  
 515 520 525  
 Arg Val Gln Gly Thr Lys Thr Lys Leu Arg Gly Arg Glu Lys Gln Arg  
 530 535 540  
 Leu Pro Asp Cys Ala Glu Lys Arg Ser Trp Leu Arg Cys Leu Lys Cys  
 545 550 555 560  
 Ser Gly Ile Leu Leu Met Lys Thr Lys Asn Ser Phe Ser Arg His  
 565 570 575

<210> 3713

<211> 617

<212> PRT

<213> Homo sapiens

<400> 3713

Met Gly Glu Thr Leu Lys Asp Pro Val Ile Lys Arg Cys Cys Glu Ala

1

5

10

15

Pro Asn Arg Leu Ser Asp Leu Gln Asn Val Ser Glu Gly Leu Glu Lys  
                   20                                  25                                  30  
 Cys Gln Lys Ser Leu Asn Asp Tyr Leu Asp Ser Lys Arg Asn Ala Phe  
                   35                                  40                                  45  
 Pro Arg Phe Phe Phe Ile Ser Asp Asp Glu Leu Leu Ser Ile Leu Gly  
                   50                                  55                                  60  
 Ser Ser Asp Pro Leu Cys Val Gln Glu His Met Ile Lys Met Tyr Asp  
                   65                                  70                                  75                                  80  
 Asn Ile Ala Ser Leu Arg Phe Asn Asp Gly Asp Ser Gly Glu Lys Leu  
                                   85                                  90                                  95  
 Val Ser Ala Met Ile Ser Ala Glu Gly Glu Val Met Glu Phe Arg Lys  
                   100                                  105                                  110  
 Ile Val Arg Ala Glu Gly Arg Val Glu Asp Trp Met Thr Ala Val Leu  
                   115                                  120                                  125  
 Asn Glu Met Arg Arg Thr Asn Arg Leu Ile Thr Lys Glu Ala Ile Phe  
                   130                                  135                                  140  
 Arg Tyr Cys Glu Asp Arg Ser Arg Val Asp Trp Met Leu Leu Tyr Gln  
                   145                                  150                                  155                                  160  
 Gly Met Val Val Leu Ala Ala Ser Gln Val Trp Trp Thr Trp Glu Val  
                                   165                                  170                                  175  
 Glu Asp Val Phe His Lys Ala Gln Lys Gly Glu Lys Gln Ala Met Lys  
                   180                                  185                                  190  
 Asn Tyr Gly Arg Lys Met His Arg Gln Ile Asp Glu Leu Val Thr Arg  
                   195                                  200                                  205  
 Ile Thr Met Pro Leu Ser Lys Asn Asp Arg Lys Lys Tyr Asn Thr Val  
                   210                                  215                                  220  
 Leu Ile Ile Asp Val His Ala Arg Asp Ile Val Asp Ser Phe Ile Arg  
                   225                                  230                                  235                                  240  
 Gly Ser Ile Leu Glu Ala Arg Glu Phe Asp Trp Glu Ser Gln Leu Arg  
                                   245                                  250                                  255  
 Phe Tyr Trp Asp Arg Glu Pro Asp Glu Leu Asn Ile Arg Gln Cys Thr  
                   260                                  265                                  270  
 Gly Thr Phe Gly Tyr Gly Tyr Glu Tyr Met Gly Leu Asn Gly Arg Leu  
                   275                                  280                                  285  
 Val Ile Thr Pro Leu Thr Asp Arg Ile Tyr Leu Thr Leu Thr Gln Ala  
                   290                                  295                                  300

Leu Ser Met Tyr Leu Gly Gly Ala Pro Ala Gly Pro Ala Gly Thr Gly  
 305 310 315 320  
 Lys Thr Glu Thr Thr Lys Asp Leu Ala Lys Ala Leu Gly Leu Leu Cys  
 325 330 335  
 Val Val Thr Asn Cys Gly Glu Gly Met Asp Tyr Arg Ala Val Gly Lys  
 340 345 350  
 Ile Phe Ser Gly Leu Ala Gln Cys Gly Ala Trp Gly Cys Phe Asp Glu  
 355 360 365  
 Phe Asn Arg Ile Asp Ala Ser Val Leu Ser Val Ile Ser Ser Gln Ile  
 370 375 380  
 Gln Thr Ile Arg Asn Ala Leu Ile His Gln Leu Thr Thr Phe Gln Phe  
 385 390 395 400  
 Glu Gly Gln Glu Ile Ser Leu Asp Ser Arg Met Gly Ile Phe Ile Thr  
 405 410 415  
 Met Asn Pro Gly Tyr Ala Gly Arg Thr Glu Leu Pro Glu Ser Val Lys  
 420 425 430  
 Ala Leu Phe Arg Pro Val Val Val Ile Val Pro Asp Leu Gln Gln Ile  
 435 440 445  
 Cys Glu Ile Met Leu Phe Ser Glu Gly Phe Leu Glu Ala Lys Thr Leu  
 450 455 460  
 Ala Lys Lys Met Thr Val Leu Tyr Lys Leu Ala Arg Glu Gln Leu Ser  
 465 470 475 480  
 Lys Gln Tyr His Tyr Asp Phe Gly Leu Arg Ala Leu Lys Ser Val Leu  
 485 490 495  
 Val Met Ala Gly Glu Leu Lys Arg Gly Ser Ser Asp Leu Arg Glu Asp  
 500 505 510  
 Val Val Leu Met Arg Ala Leu Arg Asp Met Asn Leu Pro Lys Phe Val  
 515 520 525  
 Leu Glu Asp Val Pro Leu Phe Leu Gly Leu Ile Ser Asp Leu Phe Pro  
 530 535 540  
 Gly Leu Asp Cys Pro Arg Val Arg Tyr Pro Asp Phe Asn Asp Ala Val  
 545 550 555 560  
 Glu Gln Val Leu Glu Glu Asn Gly Tyr Ala Val Leu Pro Ile Gln Val  
 565 570 575  
 Asp Lys Val Val Gln Met Phe Glu Thr Met Leu Thr Arg His Thr Thr  
 580 585 590

Met Val Val Gly Pro Thr Arg Gly Gly Lys Ser Val Val Ile Asn Thr  
 595 600 605

Leu Cys Gln Ala Gln Thr Asn Leu Ser  
 610 615

<210> 3714

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3714

Met Gln Phe Ser Lys Pro Arg Lys Leu Val Asn Thr Ile Asn Pro Gly  
 1 5 10 15  
 Ala Arg Phe Met Thr Thr Ala Met Tyr Asp Ala Arg Glu Ala Ile Ile  
 20 25 30  
 Pro Gly Ser Val Tyr Asp Arg Ser Ser Gln Gly Arg Pro Ser Ser Met  
 35 40 45  
 Tyr Phe Gln Thr His Asp Gln Ile Gly Met Ile Ser Ala Gly Pro Ser  
 50 55 60  
 His Val Ala Ala Met Asn Ile Pro Ile Pro Phe Asn Leu Val Met Pro  
 65 70 75 80  
 Pro Met Pro Pro Pro Gly Tyr Phe Gly Gln Ala Asn Gly Pro Ala Ala  
 85 90 95  
 Gly Glu His Leu Trp Leu Arg Leu Gly Val Ala Leu Leu Arg Ala Leu  
 100 105 110  
 Glu Gly Val Leu Val Cys Glu Ala Leu Ala Ser Phe Gly Ser Pro Trp  
 115 120 125  
 Thr Ala Val Phe Gln Gly Glu Ala Pro Arg Lys Ala Arg Leu Val Val  
 130 135 140  
 Gly Asp Ala Arg Arg Thr Ala Leu Gly Phe Leu Asp Pro Ala Arg Leu  
 145 150 155 160  
 Thr Ser Pro Thr Ala Lys Pro Ala Arg Met Trp Arg His Ser Pro Ser  
 165 170 175  
 Leu Arg Ala Pro  
 180

&lt;210&gt; 3715

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3715

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Met Pro Pro Cys Ile Gln Pro Arg Lys Tyr Trp Thr Leu Gln Arg Pro
  1             5             10             15
Val Cys Ser Val Asn Leu Ala Pro Ser Gly Pro Pro Glu Thr His Arg
          20             25             30
Val Ser Arg Ala Val Gly Met Pro Leu Ser Leu Thr His Pro Thr Leu
          35             40             45
Phe Gln Ala Arg His Pro Ser Leu Phe Leu Thr Leu Asp Tyr Val Leu
          50             55             60
Val Tyr Pro Leu Thr Ser Gly Ser Val Ser Gln Leu Ile Ile Ser Leu
          65             70             75             80
Ser His Ser Leu Ser His Ser Pro Ser Arg Ser His Ser Leu Ala Leu
          85             90             95
Leu Arg Phe Thr Arg Leu Ala Ile Ser Thr Ser Asp Thr Leu Pro
          100             105             110

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&lt;210&gt; 3716

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3716

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Met Thr Leu Gly Cys Asp Leu Gly Gln Met Val Ser Arg Glu Thr Ala
  1             5             10             15
Gly Asn Cys His His Ser Ile Ser Leu Arg Thr Pro Met Asp Cys Cys
          20             25             30
Ala Gln Arg Arg Pro His Gly Tyr His Ser Gly Cys Gln Trp Pro His
          35             40             45

```

Thr Val Ser Thr Phe Pro Gly Glu Leu Arg Ser Arg Leu Trp Val Trp  
 50 55 60  
 His Phe Ala Ser Val Pro Arg Val Lys Cys Ala Ser Ala Ser Phe Leu  
 65 70 75 80  
 Glu Asp Arg Val Cys Asp Phe Cys Asp Ser Ala Leu Ala Gln Asp Ser  
 85 90 95  
 Arg Asp His Val His Ile Cys Arg Pro Ser Arg Glu Gln Arg Glu Thr  
 100 105 110  
 Phe Arg Ala Val Ile Lys Thr Ser Gln Ala Glu Asn Ser Leu Cys Pro  
 115 120 125  
 His Trp His Thr Trp Cys Leu Tyr Phe His  
 130 135

<210> 3717

<211> 252

<212> PRT

<213> Homo sapiens

<400> 3717

Met Leu His Gln Ser Gly Lys Phe Leu Ile Pro Asp Ile Lys Glu Glu  
 1 5 10 15  
 Glu Lys Ser Tyr Gln Val Ile Arg Trp Phe Ser Pro Glu Asp His Gln  
 20 25 30  
 Lys Arg Ile Lys Lys His Phe Asp Ser Tyr Ile Glu Thr Ala Leu Asp  
 35 40 45  
 Gly Arg Lys Glu Ser Glu Ala Leu Val Lys Leu Met Glu Ile Phe Gly  
 50 55 60  
 Thr Gln Cys Ser Tyr Leu Leu Ser Arg Lys Asp Ile Met Asp Ser Leu  
 65 70 75 80  
 Lys Asn Glu Asn Tyr Asp Leu Val Phe Val Glu Ala Phe Asp Phe Cys  
 85 90 95  
 Ser Phe Leu Ile Ala Glu Lys Leu Val Lys Pro Phe Val Ala Ile Leu  
 100 105 110  
 Pro Thr Thr Phe Gly Ser Leu Asp Phe Gly Leu Pro Ser Pro Leu Ser  
 115 120 125



Tyr Val Pro Val Phe Pro Ser Leu Leu Thr Asp His Met Asp Phe Trp  
 130 135 140  
 Gly Arg Val Lys Asn Phe Leu Met Phe Phe Ser Phe Ser Arg Ser Gln  
 145 150 155 160  
 Trp Asp Met Gln Ser Thr Phe Asp Asn Thr Ile Lys Glu His Phe Pro  
 165 170 175  
 Glu Gly Ser Arg Pro Val Leu Ser His Leu Leu Leu Lys Ala Glu Leu  
 180 185 190  
 Trp Phe Val Asn Ser Asp Phe Ala Phe Asp Phe Ala Arg Pro Leu Leu  
 195 200 205  
 Pro Asn Thr Val Tyr Ile Gly Gly Leu Met Glu Lys Pro Ile Lys Pro  
 210 215 220  
 Val Pro Gln Asn Gly Gln Pro Ala Leu Phe Thr Thr Pro Ser Leu Phe  
 225 230 235 240  
 Ser Ser Gly Val Tyr Pro Glu Pro Leu Arg Trp Leu  
 245 250

<210> 3718

<211> 392

<212> PRT

<213> Homo sapiens

<400> 3718

Met Gln Ser Gly Gly Ser Leu Pro Phe Cys Cys Tyr Leu Pro Ser Val  
 1 5 10 15  
 Ser Ser Gln Leu Leu Leu Arg Glu Ser Tyr Cys Asn Phe Ile Lys Arg  
 20 25 30  
 Thr Gln Cys Lys Ser Ser Lys Leu Met Phe Ser Arg Asp Phe Leu Ser  
 35 40 45  
 Gly Gln Lys Tyr Cys Arg Cys Leu Leu Trp Ala Leu Pro Asp His Pro  
 50 55 60  
 Arg Arg Arg Gly Pro Thr Ser Ala Asn Ala Leu Pro Leu Ser Ala Glu  
 65 70 75 80  
 Leu Val Met Leu Leu Glu Trp Trp Ser Cys Thr Glu Cys Thr Leu Phe  
 85 90 95

Thr Asp Gln Ala Thr Val Glu Arg Phe Gly Lys Glu His Ala Val Ile  
 100 105 110  
 Ile Leu Asn His Asn Phe Glu Ile Asp Phe Leu Cys Gly Trp Thr Met  
 115 120 125  
 Cys Glu Arg Phe Gly Val Leu Gly Ser Ser Lys Val Leu Ala Lys Lys  
 130 135 140  
 Glu Leu Leu Tyr Val Pro Leu Ile Gly Trp Thr Trp Tyr Phe Leu Glu  
 145 150 155 160  
 Ile Val Phe Cys Lys Arg Lys Trp Glu Glu Asp Arg Asp Thr Val Val  
 165 170 175  
 Glu Gly Leu Arg Arg Leu Ser Asp Tyr Pro Glu Tyr Met Trp Phe Leu  
 180 185 190  
 Leu Tyr Cys Glu Gly Thr Arg Phe Thr Glu Thr Lys His Arg Val Ser  
 195 200 205  
 Met Glu Val Ala Ala Ala Lys Gly Leu Pro Val Leu Lys Tyr His Leu  
 210 215 220  
 Leu Pro Arg Thr Lys Gly Phe Thr Thr Ala Val Lys Cys Leu Arg Gly  
 225 230 235 240  
 Thr Val Ala Ala Val Tyr Asp Val Thr Leu Asn Phe Arg Gly Asn Lys  
 245 250 255  
 Asn Pro Ser Leu Leu Gly Ile Leu Tyr Gly Lys Lys Tyr Glu Ala Asp  
 260 265 270  
 Met Cys Val Arg Arg Phe Pro Leu Glu Asp Ile Pro Leu Asp Glu Lys  
 275 280 285  
 Glu Ala Ala Gln Trp Leu His Lys Leu Tyr Gln Glu Lys Asp Ala Leu  
 290 295 300  
 Gln Glu Ile Tyr Asn Gln Lys Gly Met Phe Pro Gly Glu Gln Phe Lys  
 305 310 315 320  
 Pro Ala Arg Arg Pro Trp Thr Leu Leu Asn Phe Leu Ser Trp Ala Thr  
 325 330 335  
 Ile Leu Leu Ser Pro Leu Phe Ser Phe Val Leu Gly Val Phe Ala Ser  
 340 345 350  
 Gly Ser Pro Leu Leu Ile Leu Thr Phe Leu Gly Phe Val Gly Ala Ala  
 355 360 365  
 Ser Phe Gly Val Arg Arg Leu Ile Gly Val Thr Glu Ile Glu Lys Gly  
 370 375 380

Ser Ser Tyr Gly Asn Gln Glu Phe

385

390

<210> 3719

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3719

Met Asn Tyr Leu Phe Leu Gly Gly Cys Leu His Glu Pro Val Ser His

1

5

10

15

Lys Phe Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Arg Arg

20

25

30

Thr Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asn Leu Gly

35

40

45

Ser Pro Gln Pro Pro Pro Pro Arg Phe Lys Gln Phe Ser Arg Leu Ser

50

55

60

Leu Pro Ser Ser Trp Asp Tyr Arg His Ala Pro Ser Arg Leu Ala Asn

65

70

75

80

Phe Phe Phe Phe Phe Val Phe Leu Val Glu Met Gly Phe Leu His Val

85

90

95

Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser

100

105

110

Ala Cys Gln Ser Ala Gly Ile Thr Ser Val Ser His His Ala Gln Pro

115

120

125

Ile Ser Leu Phe Ser Lys Lys Lys Gly Gly Arg Phe Leu Lys Ile Phe

130

135

140

Ser Ala Phe Ala

145

<210> 3720

<211> 152

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3720

Met Glu Ala Glu Ala Trp Gly Ser Gln Ala Arg Ala Gly Leu Gly Ala  
 1 5 10 15  
 Ala Glu Asn Cys Leu Glu Gly Gly Asn Gln Ala Phe Leu Leu Glu Arg  
 20 25 30  
 Val Thr Gly Thr Lys Gly Arg Gly Gln Gly Gln Pro Leu Glu Arg Ala  
 35 40 45  
 Gly Glu Glu Gly Glu Ala Gly Gly Asp Pro Arg Arg Asp Pro Gly Glu  
 50 55 60  
 Val Val Ala Lys Ser Arg Val Arg Ala Arg Pro His Leu Ser Leu Tyr  
 65 70 75 80  
 Pro Ala Leu Pro Gly Val Ala Leu Ala Leu Leu Cys Cys Pro Leu Gln  
 85 90 95  
 Asp Arg Cys Leu Arg Leu Val Pro Ala Cys Pro Thr Ala Gly Pro Gln  
 100 105 110  
 His Pro Gln Val Leu Pro Trp Ala Leu Gln Lys Gln Gly Val Val Arg  
 115 120 125  
 Ser Gly Pro Trp Ala Thr Glu Glu Met Val Trp Gly Thr Arg Thr Gly  
 130 135 140  
 Val Gly Gly Leu Thr Ala Val Phe  
 145 150

&lt;210&gt; 3721

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3721

Met Asn Leu Pro His Cys Ser Gly Asn Ser Arg Gly Arg Pro Pro Pro  
 1 5 10 15  
 Gly Pro Ala Met Arg Arg Asp Gly Gln Ala Gly Pro Ala Leu Gly Gly  
 20 25 30  
 Gly Arg Pro Pro Pro His Thr Tyr Leu Glu Arg Pro Glu Ala Gln Leu  
 35 40 45



&lt;210&gt; 3723

&lt;211&gt; 532

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3723

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Met Ser Ile His Leu Arg Glu Asp Ser Ser Gln Thr His Val Leu Met
  1             5             10             15
Met Lys Gly Ala Pro Glu Arg Ile Leu Glu Phe Cys Ser Thr Phe Leu
             20             25             30
Leu Asn Gly Gln Glu Tyr Ser Met Asn Asp Glu Met Lys Glu Ala Phe
             35             40             45
Gln Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly
             50             55             60
Phe Cys Phe Leu Asn Leu Pro Ser Ser Phe Ser Lys Gly Phe Pro Phe
             65             70             75             80
Asn Thr Asp Glu Ile Asn Phe Pro Met Asp Asn Leu Cys Phe Val Gly
             85             90             95
Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val
             100            105            110
Ser Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp
             115            120            125
His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser
             130            135            140
Glu Gly Thr Glu Thr Ala Glu Glu Val Ala Ala Arg Leu Lys Ile Pro
             145            150            155            160
Ile Ser Lys Val Asp Ala Ser Ala Ala Lys Ala Ile Val Val His Gly
             165            170            175
Ala Glu Leu Lys Asp Ile Gln Ser Lys Gln Leu Asp Gln Ile Leu Gln
             180            185            190
Asn His Pro Glu Ile Val Phe Ala Arg Thr Ser Pro Gln Gln Lys Leu
             195            200            205
Ile Ile Val Glu Gly Cys Gln Arg Leu Gly Ala Val Val Ala Val Thr
             210            215            220

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Gly Asp Gly Val Asn Asp Ser Pro Ala Leu Lys Lys Ala Asp Ile Gly  
 225 230 235 240  
 Ile Ala Met Gly Ile Ser Gly Ser Asp Val Ser Lys Gln Ala Ala Asp  
 245 250 255  
 Met Ile Leu Leu Asp Asp Asn Phe Ala Ser Ile Val Thr Gly Val Glu  
 260 265 270  
 Glu Gly Arg Leu Ile Phe Asp Asn Leu Lys Lys Ser Ile Met Tyr Thr  
 275 280 285  
 Leu Thr Ser Asn Ile Pro Glu Ile Thr Pro Phe Leu Met Phe Ile Ile  
 290 295 300  
 Leu Gly Ile Pro Leu Pro Leu Gly Thr Ile Thr Ile Leu Cys Ile Asp  
 305 310 315 320  
 Leu Gly Thr Asp Met Val Pro Ala Ile Ser Leu Ala Tyr Glu Ser Ala  
 325 330 335  
 Glu Ser Asp Ile Met Lys Arg Leu Pro Arg Asn Pro Lys Thr Asp Asn  
 340 345 350  
 Leu Val Asn His Arg Leu Ile Gly Met Ala Tyr Gly Gln Ile Gly Met  
 355 360 365  
 Ile Gln Ala Leu Ala Gly Phe Phe Thr Tyr Phe Val Ile Leu Ala Glu  
 370 375 380  
 Asn Gly Phe Arg Pro Val Asp Leu Leu Gly Ile Arg Leu His Trp Glu  
 385 390 395 400  
 Asp Lys Tyr Leu Asn Asp Leu Glu Asp Ser Tyr Gly Gln Gln Trp Thr  
 405 410 415  
 Tyr Glu Gln Arg Lys Val Val Glu Phe Thr Cys Gln Thr Ala Phe Phe  
 420 425 430  
 Val Thr Ile Val Val Val Gln Trp Ala Asp Leu Ile Ile Ser Lys Thr  
 435 440 445  
 Arg Arg Asn Ser Leu Phe Gln Gln Gly Met Arg Asn Lys Val Leu Ile  
 450 455 460  
 Phe Gly Ile Leu Glu Glu Thr Leu Leu Ala Ala Phe Leu Ser Tyr Thr  
 465 470 475 480  
 Pro Gly Met Asp Val Ala Leu Arg Met Tyr Pro Leu Lys Ile Thr Trp  
 485 490 495  
 Trp Leu Cys Ala Ile Pro Tyr Ser Ile Leu Ile Phe Val Tyr Asp Glu  
 500 505 510

Ile Arg Lys Leu Leu Ile Arg Gln His Pro Asp Gly Trp Val Glu Arg  
           515                    520                    525  
 Glu Thr Tyr Tyr  
           530

<210> 3724

<211> 1139

<212> PRT

<213> Homo sapiens

<400> 3724

Met Ala Gly Ile Ile Lys Lys Gln Ile Leu Lys His Leu Ser Arg Phe  
   1                    5                    10                    15  
 Thr Lys Asn Leu Ser Pro Asp Lys Ile Asn Leu Ser Thr Leu Lys Gly  
                     20                    25                    30  
 Glu Gly Glu Leu Lys Asn Leu Glu Leu Asp Glu Glu Val Leu Gln Asn  
                     35                    40                    45  
 Met Leu Asp Leu Pro Thr Trp Leu Ala Ile Asn Lys Val Phe Cys Asn  
           50                    55                    60  
 Lys Ala Ser Ile Arg Ile Pro Trp Thr Lys Leu Lys Thr His Pro Ile  
   65                    70                    75                    80  
 Cys Leu Ser Leu Asp Lys Val Ile Met Glu Met Ser Thr Cys Glu Glu  
                     85                    90                    95  
 Pro Arg Ser Pro Asn Gly Pro Ser Pro Ile Ala Thr Ala Ser Gly Gln  
                     100                    105                    110  
 Ser Glu Tyr Gly Phe Ala Glu Lys Val Val Glu Gly Ile Ser Val Ser  
           115                    120                    125  
  
 Val Asn Ser Ile Val Ile Arg Ile Gly Ala Lys Ala Phe Asn Ala Ser  
           130                    135                    140  
 Phe Glu Leu Ser Gln Leu Arg Ile Tyr Ser Val Asn Ala His Trp Glu  
   145                    150                    155                    160  
 His Gly Asp Leu Arg Phe Thr Arg Ile Gln Asp Pro Gln Arg Gly Glu  
                     165                    170                    175  
 Val Leu Thr Phe Lys Glu Ile Asn Trp Gln Met Ile Arg Ile Glu Ala



180	185	190
Asp Ala Thr Gln Ser Ser His	Leu Glu Ile Met Cys Ala Pro Val Arg	
195	200	205
Leu Ile Thr Asn Gln Ser Lys	Ile Arg Val Thr Leu Lys Arg Met Leu	
210	215	220
Lys Asp Cys Asn Val Ile Ala Thr	Lys Leu Val Leu Ile Leu Asp Asp	
225	230	235
Leu Leu Trp Val Leu Thr Asp Pro	Gln Leu Lys Ala Met Val Gln Tyr	
245	250	255
Ala Lys Ser Leu Ser Glu Ala Ile	Glu Lys Ser Thr Glu Gln Arg Lys	
260	265	270
Ser Met Ala Pro Glu Pro Thr Gln	Ser Ser Thr Val Val Ala Ser Ala	
275	280	285
Gln Gln Val Lys Thr Thr Gln Thr	Ser Asn Ala Pro Asp Val Asn Asp	
290	295	300
Ala Ile Val Lys Leu Phe Asn Asp	Phe Asp Val Lys Glu Thr Ser His	
305	310	315
His Leu Val Ile Ser His Leu Asp	Leu His Ile Cys Asp Asp Ile His	
325	330	335
Ala Lys Glu Lys Glu Ser Asn Arg	Arg Ile Thr Gly Gly Ala Met Gln	
340	345	350
Leu Ser Phe Thr Gln Leu Thr Ile	Asp Tyr Tyr Pro Tyr His Lys Ala	
355	360	365
Gly Asp Ser Cys Asn His Trp Met	Tyr Phe Ser Asp Ala Thr Lys Thr	
370	375	380
Lys Asn Gly Trp Ala Asn Glu Leu	Leu His Glu Phe Glu Cys Asn Val	
385	390	395
Glu Met Leu Lys Gln Ala Val Lys	Asp His Asn Val Gly Ser Pro Pro	
405	410	415
Lys Ser Pro Thr His Ala Ser Pro	Gln His Thr Gln Thr Glu Lys Asp	
420	425	430
Tyr Pro Leu Lys Gly Thr Cys Arg	Thr Pro Ser Val Leu Ser Gln Gln	
435	440	445
Ser Lys Ala Lys Leu Met Ser Ser	Ser Val Val Val Arg Leu Ala Asp	
450	455	460
Phe Asn Ile Tyr Gln Val Ser Thr	Ala Glu Gln Cys Arg Ser Ser Pro	

465	470	475	480
Lys Ser Met Ile Cys Cys Asn Lys Lys Ser Leu Tyr Leu Pro Gln Glu			
	485	490	495
Met Ser Ala Val Tyr Ile Glu Phe Thr Glu Tyr Tyr Tyr Pro Asp Gly			
	500	505	510
Lys Asp Phe Pro Ile Pro Ser Pro Asn Leu Tyr Ser Gln Leu Asn Ala			
	515	520	525
Leu Gln Phe Thr Val Asp Glu Arg Ser Ile Leu Trp Leu Asn Gln Phe			
	530	535	540
Leu Leu Asp Leu Lys Gln Ser Leu Asn Gln Phe Met Ala Val Tyr Lys			
545	550	555	560
Leu Asn Asp Asn Ser Lys Ser Asp Glu His Val Asp Val Arg Val Asp			
	565	570	575
Gly Leu Met Leu Lys Phe Val Ile Pro Ser Glu Val Lys Ser Glu Cys			
	580	585	590
His Gln Asp Gln Pro Arg Ala Ile Ser Ile Gln Ser Ser Glu Met Ile			
	595	600	605
Ala Thr Asn Thr Arg His Cys Pro Asn Cys Arg His Ser Asp Leu Glu			
	610	615	620
Ala Leu Phe Gln Asp Phe Lys Asp Cys Asp Phe Phe Ser Lys Thr Tyr			
625	630	635	640
Thr Ser Phe Pro Lys Ser Cys Asp Asn Phe Asn Leu Leu His Pro Ile			
	645	650	655
Phe Gln Arg His Ala His Glu Gln Asp Thr Lys Met His Glu Ile Tyr			
	660	665	670
Lys Gly Asn Ile Thr Pro Gln Leu Asn Lys Asn Thr Leu Lys Thr Ser			
	675	680	685
Ala Ala Thr Asp Val Trp Ala Val Tyr Phe Ser Gln Phe Trp Ile Asp			
	690	695	700
Tyr Glu Gly Met Lys Ser Gly Lys Gly Arg Pro Ile Ser Phe Val Asp			
705	710	715	720
Ser Phe Pro Leu Ser Ile Trp Ile Cys Gln Pro Thr Arg Tyr Ala Glu			
	725	730	735
Ser Gln Lys Glu Pro Gln Thr Cys Asn Gln Val Ser Leu Asn Thr Ser			
	740	745	750
Gln Ser Glu Ser Ser Asp Leu Ala Gly Arg Leu Lys Arg Lys Lys Leu			

755	760	765
Leu Lys Glu Tyr Tyr Ser Thr Glu Ser Glu Pro Leu Thr Asn Gly Gly		
770	775	780
Gln Lys Pro Ser Ser Ser Asp Thr Phe Phe Arg Phe Ser Pro Ser Ser		
785	790	795
Ser Glu Ala Asp Ile His Leu Leu Val His Val His Lys His Val Ser		
805	810	815
Met Gln Ile Asn His Tyr Gln Tyr Leu Leu Leu Phe Leu His Glu		
820	825	830
Ser Leu Ile Leu Leu Ser Glu Asn Leu Arg Lys Asp Val Glu Ala Val		
835	840	845
Thr Gly Ser Pro Ala Ser Gln Thr Ser Ile Cys Ile Gly Ile Leu Leu		
850	855	860
Arg Ser Ala Glu Leu Ala Leu Leu Leu His Pro Val Asp Gln Ala Asn		
865	870	875
Thr Leu Lys Ser Pro Val Ser Glu Ser Val Ser Pro Val Val Pro Asp		
885	890	895
Tyr Leu Pro Thr Glu Asn Gly Asp Phe Leu Ser Ser Lys Arg Lys Gln		
900	905	910
Ile Ser Arg Asp Ile Asn Arg Ile Arg Ser Val Thr Val Asn His Met .		
915	920	925
Ser Asp Asn Arg Ser Met Ser Val Asp Leu Ser His Ile Pro Leu Lys		
930	935	940
Asp Pro Leu Leu Phe Lys Ser Ala Ser Asp Thr Asn Leu Gln Lys Gly		
945	950	955
Ile Ser Phe Met Asp Tyr Leu Ser Asp Lys His Leu Gly Lys Ile Ser		
965	970	975
Glu Asp Glu Ser Ser Gly Leu Val Tyr Lys Ser Gly Ser Gly Glu Ile		
980	985	990
Gly Ser Glu Thr Ser Asp Lys Lys Asp Ser Phe Tyr Thr Asp Ser Ser		
995	1000	1005
Ser Ile Leu Asn Tyr Arg Glu Asp Ser Asn Ile Leu Ser Phe Asp Ser		
1010	1015	1020
Asp Gly Asn Gln Asn Ile Leu Ser Ser Thr Leu Thr Ser Lys Gly Asn		
1025	1030	1035
Glu Thr Ile Glu Ser Ile Phe Lys Ala Glu Asp Leu Leu Pro Glu Ala		

1045 1050 1055  
 Ala Ser Leu Ser Glu Asn Leu Asp Ile Ser Lys Glu Glu Thr Pro Pro  
 1060 1065 1070  
 Val Arg Thr Leu Lys Ser Gln Ser Ser Leu Ser Gly Lys Pro Lys Glu  
 1075 1080 1085  
 Arg Cys Pro Pro Asn Leu Ala Pro Leu Cys Val Ser Tyr Lys Asn Met  
 1090 1095 1100  
 Lys Arg Ser Ser Ser Gln Met Ser Leu Asp Thr Ile Ser Leu Asp Ser  
 1105 1110 1115 1120  
 Met Ile Leu Glu Glu Gln Leu Leu Glu Ser Asp Gly Ser Asp Ser His  
 1125 1130 1135  
 Met Phe Leu

<210> 3725

<211> 317

<212> PRT

<213> Homo sapiens

<400> 3725

Met Ser Pro Ser Val Thr Ala Gln Pro Leu Asp Leu Gly Leu Thr Ile  
 1 5 10 15  
 Thr Pro Glu Pro Thr Thr Glu Val Glu His Ser Thr Pro Leu Lys Lys  
 20 25 30  
 Ile Pro Pro Lys His Pro Lys Val Thr Leu Pro His Pro Asp Gln Val  
 35 40 45  
 Gln Thr Leu His Ser Asn Leu Thr Gln Val Thr Val Gln Pro Leu Asp  
 50 55 60  
 Leu Glu Leu Thr Leu Thr Pro Glu Ser Thr Met Glu Val Glu Pro Phe  
 65 70 75 80  
 Pro Thr Met Gln Lys Thr Pro Thr Gln Pro Pro Glu Leu Arg Lys Glu  
 85 90 95  
 Val Val Ala Gln Pro Pro Val Tyr Tyr Glu Thr Ser Met Pro Thr Arg  
 100 105 110  
 Gly Gln Asp Gln Ala Gln His Pro Thr Ser Pro Arg Val Thr Val Gln

115	120	125
Pro Leu Asp Leu Gly Leu Thr Ile Thr Pro Glu Ser Ile Thr Lys Val		
130	135	140
Glu Pro Ser Thr Ala Leu Met Thr Thr Ala Pro Pro Pro Glu His Leu		
145	150	155
Glu Val Thr Leu Pro Pro Pro Asp Lys Gly Gln Ala Gln His Ser Asn		
165	170	175
Leu Thr Gln Val Thr Val Gln Pro Leu Asp Leu Glu Leu Thr Ile Thr		
180	185	190
Ile Glu Pro Thr Ile Asp Val Lys Pro Ser Pro Thr Thr Glu Glu Thr		
195	200	205
Ser Thr Gln Ser Pro Asp Leu Gly Leu Ala Ile Thr Pro Glu Pro Thr		
210	215	220
Thr Glu Ile Gly Tyr Ser Thr Ala Leu Glu Lys Thr Ile Ala Pro Arg		
225	230	235
Pro Asp Gln Val Gln Thr Gln His Arg Asn Leu Thr Glu Val Thr Gly		
245	250	255
Pro Pro Thr Glu Leu Glu Pro Thr Gln Asp Ser Leu Val Gln Ser Glu		
260	265	270
Asn Tyr Ala Gln Asn Lys Ala Leu Thr Ala Pro Glu Glu Gln Lys Ala		
275	280	285
Ser Thr Ser Thr Asn Ile Cys Asp Leu Cys Thr Cys Gly Asp Glu Thr		
290	295	300
Leu Ser Cys Ile Asp Leu Ser Pro Lys Gln Arg Leu Arg		
305	310	315

&lt;210&gt; 3726

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3726

Met Ser Gln Gly Leu Leu Gly Ala Phe Cys Phe Leu Phe Trp Val Ser
1 5 10 15
Phe Phe Phe Pro Phe Leu Leu Ser Pro Phe Leu Phe Leu Leu Pro Leu

20 25 30  
 Pro Leu Ser Leu Phe Pro Phe Leu Phe Pro Phe Pro Leu Ser Ser Phe  
 35 40 45  
 Ser Ser Phe Pro Ser Leu Pro Phe Pro Phe Phe Phe Ser Phe Pro Phe  
 50 55 60  
 Pro Phe Asp Lys Val Pro Arg Leu Asp Ala Ile Thr Ala His Cys Asp  
 65 70 75 80  
 Leu His Leu Leu Gly Cys Ser Asn Pro Pro Thr Leu Ala Ser Gly Val  
 85 90 95  
 Ala Gly Ile Thr Gly Ala Asp His His Thr Trp Leu Ile Phe Val Phe  
 100 105 110  
 Phe Val Glu Leu Gly Phe Gln Pro Cys Cys Pro Gly Trp Ser Gln Thr  
 115 120 125  
 Pro Glu Leu Lys Arg Ser His Pro Pro Trp Pro Pro Lys Val Leu Gly  
 130 135 140  
 Leu Gln Ala  
 145

<210> 3727

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3727

Met Phe Leu Phe His Ser Gly Leu Cys Ser Asp Phe Thr Ser Ser Gln  
 1 5 10 15  
 Gly Pro Leu Leu Gly Pro Ser Leu Asp Trp Pro Leu Cys His Ser Arg  
 20 25 30  
 Ser Leu Pro Val Leu Tyr Pro Ala Leu His Leu Met Ser His Asn Ser  
 35 40 45  
 Phe Phe Phe Phe Phe Glu Thr Glu Ser His Ser Val Ser Arg Leu Glu  
 50 55 60  
 Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Cys Leu Pro Gly Ser  
 65 70 75 80  
 Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Thr Thr Gly Val

	85		90		95										
Cys	His	His	Ala	Gln	Leu	Ile	Leu	Phe	Val	Phe	Leu	Val	Lys	Thr	Gly
	100						105						110		
Phe	Cys	His	Val	Gly	Gln	Ala	Arg	Leu	Glu	Leu	Leu	Thr	Ser	Ser	Asp
	115						120						125		
Pro	Pro	Thr	Ser	Ala	Ser	Gln	Ser	Ala	Gly	Ile	Thr	Gly	Val	Ser	His
	130						135						140		
Arg	Thr	Arg	Pro	Cys	Gly	His	Ile	Thr	Leu	Tyr	Val	Pro	Leu	Ser	Leu
145					150					155					160
Pro	Arg	Leu	Leu	Ala	Ser										
					165										

&lt;210&gt; 3728

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3728

Met	Asn	Asn	Ser	Leu	Asp	Tyr	Leu	Ala	Tyr	Pro	Val	Ile	Val	Ser	Asn
1			5						10					15	
His	Arg	Gln	Ser	Thr	Thr	Phe	Arg	Lys	Lys	Leu	Asp	Phe	Gly	His	Tyr
			20					25					30		
Val	Ser	His	Lys	Asn	Arg	Ile	Gln	Ile	Ala	Lys	Pro	Thr	Val	Asp	Thr
		35					40						45		
Lys	Pro	Pro	Val	Ala	His	Thr	Asn	His	Ile	Leu	Lys	Leu	Ser	Lys	Leu
	50					55					60				
Gln	Gly	Glu	Gln	Lys	Lys	Ile	Asn	Lys	Ile	Glu	Tyr	Glu	Asn	Lys	Gln
65				70					75					80	
Leu	Cys	Gln	Lys	Ile	Ala	Asn	Ala	His	Arg	Gly	Pro	Ala	Lys	Val	Asp
				85					90					95	
Cys	Trp	Asn	Glu	Tyr	Phe	Ser	Lys	Ser	Leu	Asn	Arg	Glu	Thr	Arg	Asn
		100							105					110	
Arg	Glu	Leu	Val	Arg	Ile	Thr	Met	Glu	Asn	Gln	Gly	Ile	Leu	Lys	Arg
		115							120					125	
Leu	Val	Asp	Arg	Lys	Pro	His	Tyr	Asp	Arg	Arg	Ala	Ser	Glu	Ile	Asp

130                      135                      140  
 Trp Gln Asn Ser Arg Arg Tyr Ile Arg Asn Thr Thr Arg Tyr Leu Leu  
 145                      150                      155                      160  
 Ser Gln Asn Glu

<210> 3729

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3729

Met Ser His His Ala Lys Pro Lys Pro Gly Val Gln Trp Cys Lys Phe  
 1                      5                      10                      15  
 Gln Ser Glu Ser Thr Gly Arg Arg Ala Arg Ser Ala Asp Val Gln Gly  
 20                      25                      30  
 Gln Glu Lys Met Asp Val Thr Ala Gln Glu Ala Arg Thr Asn Leu Pro  
 35                      40                      45  
 Phe Tyr Leu Phe Val Leu Phe Ser Pro Gly Ser Leu Gly Gln Glu Ala  
 50                      55                      60  
 Ala Ala Val Lys Gln Ser His Ile Ser Ala Pro Ala Ser Glu Leu Arg  
 65                      70                      75                      80  
 Cys Ile Gln Leu Arg Ser Arg Ser Arg Thr Arg Gly Asn Lys Ile Ile  
 85                      90                      95  
 Trp Glu Gln Gly Gln Glu Gly Ala Gly Leu His Gly Arg  
 100                      105

<210> 3730

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3730

Met Asp Pro Ala Ser Val His Pro Pro Lys Leu Cys Pro Pro Pro Phe



1	5	10	15
Ile Phe Ile Phe Ile Phe Ile Phe Met Phe Leu Ser Ile Thr Ser Arg			
20	25	30	
Arg Arg Pro Arg Lys Ala Lys Tyr Leu Asp Glu Met Leu Ser Ser Leu			
35	40	45	
Pro Val Arg Leu Gln Pro Asp Ser Asn Ala Ser Ser Arg Val Val Leu			
50	55	60	
Gly Ser Cys Arg Val Arg Glu Pro Leu Lys Arg Trp Pro Arg Gln Ala			
65	70	75	80
Trp His Ala Met Ser Pro Pro Gly Ala Glu Phe Arg Ala Asn Ala Leu			
85	90	95	
Cys Lys Cys Leu Asn Ser Ala Asp Lys Gly His Asn Gly Glu Pro Arg			
100	105	110	
Val Ala Pro Gln Ser Cys Pro Val Gly Ala Asn Arg Phe His Gln Gln			
115	120	125	
Ile Leu Arg Thr Pro Glu Gly Thr Leu Arg Met Met Asp Glu Gly Thr			
130	135	140	
Phe Ile Leu Pro Gly Arg Arg Arg Gly Pro			
145	150		

&lt;210&gt; 3731

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3731

Met Thr Ser Leu Thr His Gly Met His Leu Thr Ser Ser Thr Ser Cys			
1	5	10	15
Ser Cys Gln Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Arg Ser			
20	25	30	
Ser Gly Thr Ser Ser Thr Ser Arg Ser Trp Trp Ser Ser Gly Thr Ser			
35	40	45	
Ser Thr Ser Cys Ser Trp Trp Ser Ser Gly Thr Ser Ser Thr Phe Cys			
50	55	60	

Ser Cys Trp Ser Ser Gly Thr Ser Phe Thr Ser Cys Ser Cys Trp Ser  
 65 70 75 80  
 Ser Gly Thr Ser Ser Thr Pro Cys Ser Cys Arg Ser Ser Gly Thr Ser  
 85 90 95  
 Ser Thr Ser Cys Ser Cys Trp Ser Ser Gly Thr Ser Ser Thr Ser Trp  
 100 105 110  
 Ser Cys Lys Ser Ser Gly Thr Ser Ser Thr Cys Tyr Met Cys Leu Ser  
 115 120 125  
 Ser Gly Thr Ser Ser Thr Ser Tyr Ser Ser Trp Ser Ser Gln Thr Ser  
 130 135 140  
 Ser Thr Ser Ser Met Cys Leu Pro Ser Arg Thr Ser Ser Ile Phe Tyr  
 145 150 155 160  
 Ser Cys Leu Pro Leu Gly His His Leu Pro Phe Cys Ser Val Arg Pro  
 165 170 175  
 Leu Gly Pro Pro Thr Thr Ser Pro Leu Ser Asn Leu Trp Ile Leu Ser  
 180 185 190  
 His Pro Phe Tyr Leu Gly Gly Val Trp Pro Leu Asn Asn His Leu His  
 195 200 205  
 Met Asn Leu Leu Gly Tyr Phe Asn Asn Phe His Leu Trp Pro Leu Gly  
 210 215 220  
 Leu Gln Pro Leu Pro Pro Pro Gly Ser Pro Leu Val His Leu Pro Pro  
 225 230 235 240  
 Pro Pro Leu Gly Trp Pro Leu Leu Ser Glu Leu Leu Gln Asp Leu Asn  
 245 250 255  
 Gln Leu Pro Tyr Pro Leu Leu Pro Val Gly Pro Arg Pro Arg Pro Pro  
 260 265 270  
 His Val Leu Leu Gly Ile Phe Ile  
 275 280

<210> 3732

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3732

Met Cys Leu Thr Ile Gln Gly Ala Ile Trp Val Arg Thr Gln Ser Gln  
 1 5 10 15  
 Thr Ile Ser Leu Ala Asn Glu Glu Thr Glu Ser Glu Arg Ser Ser Asp  
 20 25 30  
 Val Pro Lys Ser Ala Arg Pro Val Ser Gly Arg Ala Thr Leu Leu Glu  
 35 40 45  
 Glu Asp Ser Pro Ala Pro His Pro Pro Cys Phe Ser Met Tyr Tyr Val  
 50 55 60  
 Pro Ala Ser Leu Phe Ala Ala Pro Leu Glu Cys Phe Ser Met Gln Leu  
 65 70 75 80  
 Ser Leu Gln Ser Val Val Pro Ala His Gly Leu Pro Ser Ser Ser Arg  
 85 90 95  
 Arg Gln Asn Arg Gly Lys Pro  
 100

<210> 3733

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3733

Met Arg Val Met Leu Thr Phe Phe Ile Pro Lys Pro Ile Arg Ile Arg  
 1 5 10 15  
 Phe Ala Asn Ser Ser Gly Lys Asn Gly Arg Lys Gly Ser Pro Leu Lys  
 20 25 30  
 Ser Arg Leu Phe Tyr Cys Phe Ser Asn Ile Lys Asn Lys Gln Leu Gly  
 35 40 45  
 Glu Val Phe Leu Phe Leu Phe Leu Phe Val Phe Gly Leu Gly Ser Val  
 50 55 60  
 Gly Gly Arg Gly Leu Ser Lys Trp Cys Ala Arg Lys Ile Asn Thr Gln  
 65 70 75 80  
 Leu Thr Tyr Lys His Glu Gly Leu Tyr Gln Gln Lys Phe Lys Val Pro  
 85 90 95  
 Arg Phe Phe Leu Ile Phe Phe Cys Leu  
 100 105

&lt;210&gt; 3734

&lt;211&gt; 620

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

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Met Lys Thr Arg Pro Ser Ser Leu Glu Ser Val Thr Cys Trp Arg Ala
  1             5             10             15
Lys Phe Met Glu Ala Phe Phe Ser His Val Leu Arg Gly Thr Ile Asp
          20             25             30
Val Ser Ser Asp Arg Arg Leu Cys Asp Gln Arg Phe Ser Pro Leu Leu
          35             40             45
His Ser Ser Arg His Val Arg Gln Leu Thr Ile Cys Asn Met Leu Gln
          50             55             60
Gly Ala Thr Glu Leu Val Ala Glu Pro Asn Arg Arg Val Leu Glu Thr
          65             70             75             80
Leu Ala Ser Ser Leu His Thr Leu Lys Phe Arg His Leu Leu Phe Ser
          85             90             95
Asp Val Ala Ala Gln Gln Ser Leu Arg Gln Leu Leu His Gln Leu Ile
          100            105            110
His His Gly Ala Val Ser Gln Val Ser Leu Tyr Ser Trp Pro Val Pro
          115            120            125
Glu Ser Ala Leu Phe Ile Leu Ile Leu Thr Met Ser Ala Gly Phe Trp
          130            135            140
Gln Pro Gly Pro Gly Gly Pro Pro Cys Arg Leu Cys Gly Glu Ala Ser
          145            150            155            160
Arg Gly Arg Ala Pro Ser Arg Asp Glu Gly Ser Leu Leu Leu Gly Ser
          165            170            175
Arg Arg Pro Arg Arg Asp Ala Ala Glu Arg Cys Ala Ala Ala Leu Met
          180            185            190
Ala Ser Arg Arg Lys Ser Glu Ala Lys Gln Met Pro Arg Ala Ala Pro
          195            200            205
Ala Thr Arg Val Thr Arg Arg Ser Thr Gln Glu Ser Leu Thr Ala Gly
          210            215            220

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Gly Thr Asp Leu Lys Arg Glu Leu His Pro Pro Ala Thr Ser His Glu  
 225 230 235 240  
 Ala Pro Gly Thr Lys Arg Ser Pro Ser Ala Pro Ala Ala Thr Ser Ser  
 245 250 255  
 Ala Ser Ser Ser Thr Ser Ser Tyr Lys Arg Ala Pro Ala Ser Ser Ala  
 260 265 270  
 Pro Gln Pro Lys Pro Leu Lys Arg Phe Lys Arg Ala Ala Gly Lys Lys  
 275 280 285  
 Gly Ala Arg Thr Arg Gln Gly Pro Gly Ala Glu Ser Glu Asp Leu Tyr  
 290 295 300  
 Asp Phe Val Phe Ile Val Ala Gly Glu Lys Glu Asp Gly Glu Glu Met  
 305 310 315 320  
 Glu Ile Gly Glu Val Ala Cys Gly Ala Leu Asp Gly Ser Asp Pro Ser  
 325 330 335  
 Cys Leu Gly Leu Pro Ala Leu Glu Ala Ser Gln Arg Phe Arg Ser Ile  
 340 345 350  
 Ser Thr Leu Glu Leu Phe Thr Val Pro Leu Ser Thr Glu Ala Ala Leu  
 355 360 365  
 Thr Leu Cys His Leu Leu Ser Ser Trp Val Ser Leu Glu Ser Leu Thr  
 370 375 380  
 Leu Ser Tyr Asn Gly Leu Gly Ser Asn Ile Phe Arg Leu Leu Asp Ser  
 385 390 395 400  
 Leu Arg Ala Leu Ser Gly Gln Ala Gly Cys Arg Leu Arg Ala Leu His  
 405 410 415  
 Leu Ser Asp Leu Phe Ser Pro Leu Pro Ile Leu Glu Leu Thr Arg Ala  
 420 425 430  
 Ile Val Arg Ala Leu Pro Leu Leu Arg Val Leu Ser Ile Arg Val Asp  
 435 440 445  
 His Pro Ser Gln Arg Asp Asn Pro Gly Val Pro Gly Asn Ala Gly Pro  
 450 455 460  
 Pro Ser His Ile Ile Gly Asp Glu Glu Ile Pro Glu Asn Cys Leu Glu  
 465 470 475 480  
 Gln Leu Glu Met Gly Phe Pro Arg Gly Ala Gln Pro Ser Pro Leu Leu  
 485 490 495  
 Cys Ser Val Leu Lys Ala Ser Gly Ser Leu Gln Gln Leu Ser Leu Asp  
 500 505 510

Ser Ala Thr Phe Ala Ser Pro Gln Asp Phe Gly Leu Val Leu Gln Thr  
 515 520 525  
 Leu Lys Glu Tyr Asn Leu Ala Leu Lys Arg Leu Ser Phe His Asp Met  
 530 535 540  
 Asn Leu Ala Asp Cys Gln Ser Glu Val Leu Phe Leu Leu Gln Asn Leu  
 545 550 555 560  
 Thr Leu Gln Glu Ile Thr Phe Ser Phe Cys Arg Leu Phe Glu Lys Arg  
 565 570 575  
 Pro Ala Gln Phe Leu Pro Glu Met Val Ala Ala Met Lys Gly Asn Ser  
 580 585 590  
 Thr Leu Lys Gly Leu Arg Leu Pro Gly Asn Arg Leu Gly Gly Gly Gln  
 595 600 605  
 Thr Leu Gly Arg Glu Arg Gly Lys Glu Leu Gly Leu  
 610 615 620

<210> 3735

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3735

Met Thr Val Cys Pro Ser Leu Ser Ser Cys Thr Ala Ser Ala Ser Leu  
 1 5 10 15  
 Gln Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln Cys Gln Pro Leu  
 20 25 30  
 Ser Thr Cys Thr Ala Ala Gly Ser Ser Ser Leu Ser Thr Cys Thr Ala  
 35 40 45  
 Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser Pro Pro Ala Gln  
 50 55 60  
 Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln Pro Leu Ser  
 65 70 75 80  
 Thr Cys Thr Ala Ser Ala Ser Leu His Leu His Ser Val Ser Leu Ser  
 85 90 95  
 Pro Pro Ala Gln Arg Leu Gly Ala Ala Val Ser Pro Pro Ala Gln Arg  
 100 105 110

Gln Pro Leu Ser Thr Cys Thr Ala Ser Ala Ser Pro Pro Ala Gln Arg  
 115 120 125

Gln Pro Leu Ser Thr Cys Thr Val Ala Gly Ser Ser Ser Leu Ser Thr  
 130 135 140

Cys Thr Ala Ser Ala Ser Phe His Leu His Ser Val Ser Leu Ser Pro  
 145 150 155 160

Pro Ala Gln Arg Leu Gly Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln  
 165 170 175

Pro Leu Ser Thr Cys Thr Ala Ala Ala Ser Pro Pro Ala Gln Arg Gln  
 180 185 190

Pro Leu Ser Thr Cys Thr Val Ala Ala Ser Leu His Leu His Ser Gly  
 195 200 205

Trp Glu Gln Gln Pro Leu His Leu His Asn Ser Ser Leu Ser Pro Pro  
 210 215 220

Ala Gln Gln Leu Gly Ala Ala Ala Ser Gln Gly Cys Cys Lys Asp Gly  
 225 230 235 240

Val Ser Thr Cys Asn Val Arg Thr Ala Pro Ala Thr His Cys Ala Val  
 245 250 255

Cys Arg Ala Val Val Met Val Thr Val Gly Val Thr Gly Gly Arg Glu  
 260 265 270

Leu Arg Asp Ser Ser Gly  
 275

<210> 3736

<211> 187

<212> PRT

<213> Homo sapiens

<400> 3736

Met Asn Thr Leu Ile Phe Thr His Leu Cys Ser Leu Glu Pro Ile Thr  
 1 5 10 15

Met Ser Gln Asn Cys Ala Tyr Leu Val Leu Val Asp Thr Val Leu Gln  
 20 25 30

Asn Ile Pro Leu Lys Lys Leu Asn Asn Ser Ala Asn Phe Pro Ile Pro  
           35                          40                          45  
 Ser Leu Pro Val Asp Thr Ile Arg Leu Leu Thr Phe Leu Gln Phe Lys  
           50                          55                          60  
 Lys Thr Leu His Met His Ser Tyr Thr Gln Lys Gln Ser Leu Leu Lys  
           65                          70                          75                          80  
 Cys His Leu Leu Asn Glu Val Ile Met Ile Phe Phe Leu Lys Leu Lys  
                           85                          90                          95  
 Tyr His Pro Pro Gln His Ser Leu Ile Pro Phe Thr Leu Phe Ser Ile  
                           100                          105                          110  
 Val Leu Thr Thr Phe Trp His Ala Val Val Ser Leu Leu Ile Leu Asp  
           115                          120                          125  
 Cys Arg Leu Gln Lys Gly Lys Ser Leu Gly Phe Cys Pro Val Asn Tyr  
           130                          135                          140  
 Glu Gln Cys Leu Ala Asp Asp Lys Lys Thr His Ile Phe Ile Glu Leu  
           145                          150                          155                          160  
 Asn Gly His Gly Asn Cys Arg Ile His Met Asn Phe Ser His Ser Cys  
                           165                          170                          175  
 Tyr Val Ser Pro Leu Ala His Leu Ser Leu Val  
                           180                          185

<210> 3737

<211> 225

<212> PRT

<213> Homo sapiens

<400> 3737

Met Leu Phe Val Phe Arg Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe  
           1                          5                          10                          15  
 Arg Gly Arg Thr Ala Asp Phe Val Phe Met Phe Leu Phe Gly Gly Val  
                           20                          25                          30  
 Leu Met Thr Val Ser Phe Pro Gln Ala Leu Glu Pro Arg Ala Arg Ala  
           35                          40                          45  
 Pro Arg Arg Pro Ala Cys Val Gly Pro Gly Ala Asn Thr Ala Met Pro



50                      55                      60  
 Glu Arg Asp Thr Val Ala Val Ser Ser Leu Val Cys Val Glu Gly Pro  
 65                      70                      75                      80  
 Leu Cys Ala Gln Leu Gln Gly Ser Gly Leu Asp Leu Gln Cys Cys Met  
                     85                      90                      95  
 Gln Asn Thr Lys Pro Arg Thr Lys Glu Pro Gly Thr Val Pro Ala Leu  
                     100                      105                      110  
 Gly Ala His Gly Leu Leu Ala Ala Ala Gly Gln Leu His Pro Arg Gly  
                     115                      120                      125  
 Pro Ala Gly Asp Cys Gly Gly Pro Tyr Leu Leu Leu Pro Gly Gly Arg  
                     130                      135                      140  
 Leu Pro Gln Pro Ala Trp Arg Gln Glu Ala Pro Ala Asp Pro Trp Leu  
 145                      150                      155                      160  
 Pro Val Ser Val Glu Ser Pro Pro Ser Leu Ser Pro Pro Ser Glu Gly  
                     165                      170                      175  
 Ser Pro Pro Met Gly Thr Cys Ala Gly Leu Cys Ser Thr Arg Ala Pro  
                     180                      185                      190  
 Pro His Arg Lys Leu Leu Leu Asp Val Pro Ala Glu Asp Pro Asn Tyr  
                     195                      200                      205  
 Leu Pro Leu Pro Glu Glu Gln Pro Gly Pro His Leu Pro Pro Pro Gln  
                     210                      215                      220  
 Gln  
 225

<210> 3738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3738

Met Glu Asn Thr Leu Tyr Ile Phe Phe Phe Phe Leu Arg Trp Ser Leu  
 1                      5                      10                      15  
 Thr Leu Ser Pro Arg Leu Val Cys Ser Gly Val Ile Ser Ala His Cys  
                     20                      25                      30  
 Asn Leu Gln Leu Leu Gly Ser Ser Ala Ser Leu Ala Ser Ala Phe Arg

35 40 45  
 Val Ala Gly Ile Thr Asp Leu His His His Ala Gln Leu Ile Phe Val  
 50 55 60  
 Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Val Gly Leu Glu  
 65 70 75 80  
 Leu Leu Thr Ser Ser Asp Pro Pro Ala Ser Val Ser Glu Ser Ala Gly  
 85 90 95  
 Ile Thr Gly Met Ser His Arg Ala Trp Pro Ser Leu Arg Ile Phe Ser  
 100 105 110  
 Trp

<210> 3739

<211> 447

<212> PRT

<213> Homo sapiens

<400> 3739

Met Pro His Val Leu Ile Glu Lys Gly Asp Met Thr Leu Gly Glu Phe  
 1 5 10 15  
 Asp Gln Arg Leu Lys Gly Arg Thr Asp Phe Ile Lys Gly Met Lys Lys  
 20 25 30  
 Lys Ser Arg Ala Glu Arg Lys Thr Glu Ile Ile Arg Lys Arg Leu His  
 35 40 45  
 Lys Asp Ile Pro His His Ser Val Ile Met Leu Asn Phe Cys Pro Asp  
 50 55 60  
 Leu Gln Ser Val Gln Pro Cys Leu Arg Lys Ala His Gly Glu Phe Ile  
 65 70 75 80  
 Phe Leu Ile Asp Arg Ser Ser Ser Met Ser Gly Ile Ser Met His Arg  
 85 90 95  
 Val Lys Asp Ala Met Leu Val Ala Leu Lys Ser Leu Met Pro Ala Cys  
 100 105 110  
 Leu Phe Asn Ile Ile Gly Phe Gly Ser Thr Phe Lys Ser Leu Phe Pro  
 115 120 125  
 Ser Ser Gln Thr Tyr Ser Glu Asp Ser Leu Ala Met Ala Cys Asp Asp

130	135	140	
Ile Gln Arg Met Lys Ala Asp Met Gly Gly Thr Asn Ile Leu Ser Pro			
145	150	155	160
Leu Lys Trp Val Ile Arg Gln Pro Val His Arg Gly His Pro Arg Leu			
	165	170	175
Leu Phe Val Ile Thr Asp Gly Ala Val Asn Asn Thr Gly Lys Val Leu			
	180	185	190
Glu Leu Val Arg Asn His Ala Phe Ser Thr Arg Cys Tyr Ser Phe Gly			
	195	200	205
Ile Gly Pro Asn Val Cys His Arg Leu Val Lys Gly Leu Ala Ser Val			
	210	215	220
Ser Glu Gly Ser Ala Glu Leu Leu Met Glu Gly Glu Arg Leu Gln Pro			
225	230	235	240
Lys Met Val Lys Ser Leu Lys Lys Ala Met Ala Pro Val Leu Ser Asp			
	245	250	255
Val Thr Val Glu Trp Ile Phe Pro Glu Thr Thr Glu Val Leu Val Ser			
	260	265	270
Pro Val Ser Ala Ser Ser Leu Phe Pro Gly Glu Arg Leu Val Gly Tyr			
	275	280	285
Gly Ile Val Cys Asp Ala Ser Leu His Ile Ser Asn Pro Arg Ser Asp			
	290	295	300
Lys Arg Arg Arg Tyr Ser Met Leu His Ser Gln Glu Ser Gly Ser Ser			
305	310	315	320
Val Phe Tyr His Ser Gln Asp Asp Gly Pro Gly Leu Glu Gly Gly Asp			
	325	330	335
Cys Ala Lys Asn Ser Gly Ala Pro Phe Ile Leu Gly Gln Ala Lys Asn			
	340	345	350
Ala Arg Leu Ala Ser Gly Asp Ser Thr Thr Lys His Asp Leu Asn Leu			
	355	360	365
Ser Gln Arg Arg Arg Ala Tyr Ser Thr Asn Gln Ile Thr Asn His Lys			
	370	375	380
Pro Leu Pro Arg Ala Thr Met Ala Ser Asp Pro Met Pro Ala Ala Lys			
385	390	395	400
Arg Tyr Pro Leu Arg Lys Ala Arg Leu Gln Asp Leu Thr Asn Gln Thr			
	405	410	415
Ser Leu Asp Val Gln Arg Trp Gln Ile Asp Leu Gln Ala Phe Ile Cys			

420                      425                      430  
 Leu Thr Ser Glu Asp Thr Phe Gln Ile Arg Thr Pro Thr Gly Gln  
 435                      440                      445

<210> 3740

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3740

Met Lys Ala Lys Glu Gly Arg Asn Val Tyr Ser Ser Ser Arg Tyr Asp  
 1                      5                      10                      15  
 Asp Tyr Asp Arg Tyr Arg Arg Ser Arg Ser Arg Ser Tyr Glu Arg Arg  
 20                      25                      30  
 Arg Ser Arg Ser Arg Ser Phe Asp Tyr Asn Tyr Arg Arg Ser Tyr Ser  
 35                      40                      45  
 Pro Arg Asn Ser Arg Pro Thr Gly Arg Pro Arg Arg Ser Arg Ser His  
 50                      55                      60  
 Ser Asp Asn Asp Arg Phe Lys His Arg Asn Arg Ser Phe Ser Arg Ser  
 65                      70                      75                      80  
 Lys Ser Asn Ser Arg Ser Arg Ser Lys Ser Gln Pro Lys Lys Glu Met  
 85                      90                      95  
 Lys Ala Lys Ser Arg Ser Arg Ser Ala Ser His Thr Lys Thr Arg Gly  
 100                      105                      110  
 Thr Ser Lys Thr Asp Ser Lys Thr His Tyr Lys Ser Gly Ser Arg Tyr  
 115                      120                      125  
 Glu Lys Glu Ser Arg Lys Lys Glu Pro Pro Arg Ser Lys Ser Gln Ser  
 130                      135                      140  
 Arg Ser Gln Ser Arg Ser Arg Ser Lys Ser Arg Ser Arg Ser Trp Thr  
 145                      150                      155                      160  
 Ser Pro Lys Ser Ser Gly His  
 165

<210> 3741

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3741

Met Ala Gln Gln Gly Glu Gly His His Thr His His Gln Ile Leu Leu  
 1 5 10 15  
 Leu Val Ser Gly Phe His Ile Leu Phe Gln Ile Phe Arg Pro Ala His  
 20 25 30  
 Ser Leu Thr Phe Pro Ser Leu Leu His Ser Ser Lys Val Glu Leu Pro  
 35 40 45  
 Ala Ala Thr Gly Ile Ala Ala Lys Trp Glu Arg Ser Arg Val Val Arg  
 50 55 60  
 Ala Ala Pro Asp Asn Leu Gln Arg Ala Leu Leu Glu Leu Gly Cys Ala  
 65 70 75 80  
 Ser Leu Asn Leu Ser Tyr Tyr Met Cys Trp Val Arg Asp His Ala Tyr  
 85 90 95  
 Leu Pro Ala Gln Glu Leu Thr Glu Glu Val Ser Lys Lys Cys Leu Leu  
 100 105 110  
 Asp Glu

&lt;210&gt; 3742

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3742

Met Lys Pro Thr Leu Leu Ala Gln Gln Glu Thr Gln Lys Ala Ala Leu  
 1 5 10 15  
 Arg Tyr Glu Arg Ala Val Ser Met His Asn Ala Ala Arg Glu Met Val  
 20 25 30  
 Phe Val Ala Glu Gln Gly Val Met Ala Asp Lys Asn Arg Leu Asp Pro  
 35 40 45  
 Thr Trp Gln Glu Met Leu Asn His Ala Thr Cys Lys Val Asn Glu Ala

50	55	60
Glu Glu Glu Arg Leu Arg Gly Glu Arg Glu His Gln Arg Val Thr Arg		
65	70	75
Leu Cys Gln Gln Ala Glu Ala Arg Val Gln Ala Leu Gln Lys Thr Leu		
85	90	95
Arg Arg Ala Ile Gly Lys Ser Arg Pro Tyr Phe Glu Leu Lys Ala Gln		
100	105	110
Phe Ser Gln Ile Leu Glu Glu His Lys Ala Lys Val Thr Glu Leu Glu		
115	120	125
Gln Gln Val Ala Gln Ala Lys Thr Arg Tyr Ser Val Ala Leu Arg Asn		
130	135	140
Leu Glu Gln Ile Ser Glu Gln Ile His Ala Arg Arg Arg Gly Gly Leu		
145	150	155
Pro Pro His Pro Leu Gly Pro Arg Arg Ser Ser Pro Val Gly Ala Glu		
165	170	175
Ala Gly Pro Glu Asp Met Glu Asp Gly Asp Ser Gly Ile Glu Gly Ala		
180	185	190
Glu Gly Ala Gly Leu Glu Glu Gly Ser Ser Leu Gly Pro Gly Pro Ala		
195	200	205
Pro Asp Thr Asp Thr Leu Ser Leu Leu Ser Leu Arg Thr Val Ala Ser		
210	215	220
Asp Leu Gln Lys Cys Asp Ser Val Glu His Leu Arg Gly Leu Ser Asp		
225	230	235
His Val Ser Leu Asp Gly Gln Glu Leu Gly Thr Arg Ser Gly Gly Arg		
245	250	255
Arg Gly Ser Asp Gly Gly Ala Arg Gly Gly Arg His Gln Arg Ser Val		
260	265	270
Ser Leu		

&lt;210&gt; 3743

&lt;211&gt; 1085

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3743

Met Lys Ile Gly Ser Glu Glu Leu Val Tyr Ile Thr His Ile Asp Asp  
 1 5 10 15  
 Pro Trp Thr Phe Tyr Cys Gln Leu Ala Arg Asn Ala Asn Ile Leu Glu  
 20 25 30  
 Glu Leu Ser Cys Ser Ile Thr Gln Leu Ser Lys Val Leu Leu Asn Leu  
 35 40 45  
 Lys Thr Ser Pro Leu Asn Pro Gly Thr Leu Cys Leu Ala Lys Tyr Thr  
 50 55 60  
 Asp Gly Asn Trp Tyr Arg Gly Ile Val Ile Glu Lys Glu Pro Lys Lys  
 65 70 75 80  
 Val Phe Phe Val Asp Phe Gly Asn Ile Tyr Val Val Thr Ser Asp Asp  
 85 90 95  
 Leu Leu Pro Ile Pro Ser Asp Ala Tyr Asp Val Leu Leu Leu Pro Met  
 100 105 110  
 Gln Ala Val Arg Cys Ser Leu Ser Asp Ile Pro Asp His Ile Pro Glu  
 115 120 125  
 Glu Val Val Val Trp Phe Gln Glu Thr Ile Leu Asp Lys Ser Leu Lys  
 130 135 140  
 Ala Leu Val Val Ala Lys Asp Pro Asp Gly Thr Leu Ile Ile Glu Leu  
 145 150 155 160  
 Tyr Gly Asp Asn Ile Gln Ile Ser Ala Ser Ile Asn Lys Lys Leu Gly  
 165 170 175  
 Leu Leu Ser Tyr Lys Asp Arg Ile Arg Lys Lys Glu Ser Glu Val Leu  
 180 185 190  
 Cys Ser Thr Thr Glu Thr Leu Glu Glu Lys Asn Glu Asn Met Lys Leu  
 195 200 205  
 Pro Cys Thr Glu Tyr Leu Ser Lys Ser Val Gly Tyr Lys Leu Pro Asn  
 210 215 220  
 Lys Glu Ile Leu Glu Glu Ser Tyr Lys Pro Gln Ile Asn Ser Ser Tyr  
 225 230 235 240  
 Lys Glu Leu Lys Leu Leu Gln Ser Leu Thr Lys Thr Asn Leu Val Thr  
 245 250 255  
 Gln Tyr Gln Asp Ser Val Gly Asn Lys Asn Ser Gln Val Phe Pro Leu  
 260 265 270  
 Thr Thr Glu Lys Lys Glu Glu Ile Ser Ala Glu Thr Pro Leu Lys Thr

275	280	285	
Ala Arg Val Glu Ala Thr Leu Ser Glu Arg Lys Ile Gly Asp Ser Cys			
290	295	300	
Asp Lys Asp Leu Pro Leu Lys Phe Cys Glu Phe Pro Gln Lys Thr Ile			
305	310	315	320
Met Pro Gly Phe Lys Thr Thr Val Tyr Val Ser His Ile Asn Asp Leu			
	325	330	335
Ser Asp Phe Tyr Val Gln Leu Ile Glu Asp Glu Ala Glu Ile Ser His			
	340	345	350
Leu Ser Glu Arg Leu Asn Ser Val Lys Thr Arg Pro Glu Tyr Tyr Val			
	355	360	365
Gly Pro Pro Leu Gln Arg Gly Asp Met Ile Cys Ala Val Phe Pro Glu			
	370	375	380
Asp Asn Leu Trp Tyr Arg Ala Val Ile Lys Glu Gln Gln Pro Asn Asp			
385	390	395	400
Leu Leu Ser Val Gln Phe Ile Asp Tyr Gly Asn Val Ser Val Val His			
	405	410	415
Thr Asn Lys Ile Gly Arg Leu Asp Leu Val Asn Ala Ile Leu Pro Gly			
	420	425	430
Leu Cys Ile His Cys Ser Leu Gln Gly Phe Glu Val Pro Asp Asn Lys			
	435	440	445
Asn Ser Lys Lys Met Met His Tyr Phe Ser Gln Arg Thr Ser Glu Ala			
	450	455	460
Ala Ile Arg Cys Glu Phe Val Lys Phe Gln Asp Arg Trp Glu Val Ile			
465	470	475	480
Leu Ala Asp Glu His Gly Ile Ile Ala Asp Asp Met Ile Ser Arg Tyr			
	485	490	495
Ala Leu Ser Glu Lys Ser Gln Val Glu Leu Ser Thr Gln Val Ile Lys			
	500	505	510
Ser Ala Ser Ser Lys Ser Val Asn Lys Ser Asp Ile Asp Thr Ser Val			
	515	520	525
Phe Leu Asn Trp Tyr Asn Pro Glu Lys Lys Met Ile Arg Ala Tyr Ala			
	530	535	540
Thr Val Ile Asp Gly Pro Glu Tyr Phe Trp Cys Gln Phe Ala Asp Thr			
545	550	555	560
Glu Lys Leu Gln Cys Leu Glu Val Glu Val Gln Thr Ala Gly Glu Gln			



	565		570		575										
Val	Ala	Asp	Arg	Arg	Asn	Cys	Ile	Pro	Cys	Pro	Tyr	Ile	Gly	Asp	Pro
	580							585					590		
Cys	Ile	Val	Arg	Tyr	Arg	Glu	Asp	Gly	His	Tyr	Tyr	Arg	Ala	Leu	Ile
	595						600					605			
Thr	Asn	Ile	Cys	Glu	Asp	Tyr	Leu	Val	Ser	Val	Arg	Leu	Val	Asp	Phe
	610					615					620				
Gly	Asn	Ile	Glu	Asp	Cys	Val	Asp	Pro	Lys	Ala	Leu	Trp	Ala	Ile	Pro
625					630					635				640	
Ser	Glu	Leu	Leu	Ser	Val	Pro	Met	Gln	Ala	Phe	Pro	Cys	Cys	Leu	Ser
			645					650					655		
Gly	Phe	Asn	Ile	Ser	Glu	Gly	Leu	Cys	Ser	Gln	Glu	Gly	Asn	Asp	Tyr
	660						665					670			
Phe	Tyr	Glu	Ile	Ile	Thr	Glu	Asp	Val	Leu	Glu	Ile	Thr	Ile	Leu	Glu
	675					680						685			
Ile	Arg	Arg	Asp	Val	Cys	Asp	Ile	Pro	Leu	Ala	Ile	Val	Asp	Leu	Lys
	690					695					700				
Ser	Lys	Gly	Lys	Ser	Ile	Asn	Glu	Lys	Met	Glu	Lys	Tyr	Ser	Lys	Thr
705				710						715				720	
Gly	Ile	Lys	Ser	Ala	Leu	Pro	Tyr	Glu	Asn	Ile	Asp	Ser	Glu	Ile	Lys
			725					730					735		
Gln	Thr	Leu	Gly	Ser	Tyr	Asn	Leu	Asp	Val	Gly	Leu	Lys	Lys	Leu	Ser
	740						745					750			
Asn	Lys	Ala	Val	Gln	Asn	Lys	Ile	Tyr	Met	Glu	Gln	Gln	Thr	Asp	Glu
	755					760						765			
Leu	Ala	Glu	Ile	Thr	Glu	Lys	Asp	Val	Asn	Ile	Ile	Gly	Thr	Lys	Pro
	770					775					780				
Ser	Asn	Phe	Arg	Asp	Pro	Lys	Thr	Asp	Asn	Ile	Cys	Glu	Gly	Phe	Glu
785				790						795				800	
Asn	Pro	Cys	Lys	Asp	Lys	Ile	Asp	Thr	Glu	Glu	Leu	Glu	Gly	Glu	Leu
		805						810					815		
Glu	Cys	His	Leu	Val	Asp	Lys	Ala	Glu	Phe	Asp	Asp	Lys	Tyr	Leu	Ile
	820						825					830			
Thr	Gly	Phe	Asn	Thr	Leu	Leu	Pro	His	Ala	Asn	Glu	Thr	Lys	Glu	Ile
	835					840						845			
Leu	Glu	Leu	Asn	Ser	Leu	Glu	Val	Pro	Leu	Ser	Pro	Asp	Asp	Glu	Ser

850	855	860	
Lys Glu Phe Leu Glu Leu Glu Ser Ile Glu Leu Gln Asn Ser Leu Val			
865	870	875	880
Val Asp Glu Glu Lys Gly Glu Leu Ser Pro Val Pro Pro Asn Val Pro			
885	890	895	
Leu Ser Gln Glu Cys Val Thr Lys Gly Ala Met Glu Leu Phe Thr Leu			
900	905	910	
Gln Leu Pro Leu Ser Cys Glu Ala Glu Lys Gln Pro Glu Leu Glu Leu			
915	920	925	
Pro Thr Ala Gln Leu Pro Leu Asp Asp Lys Met Asp Pro Leu Ser Leu			
930	935	940	
Gly Val Ser Gln Lys Ala Gln Glu Ser Met Cys Thr Glu Asp Met Arg			
945	950	955	960
Lys Ser Ser Cys Val Glu Ser Phe Asp Asp Gln Arg Arg Met Ser Leu			
965	970	975	
His Leu His Gly Ala Asp Cys Asp Pro Lys Thr Gln Asn Glu Met Asn			
980	985	990	
Ile Cys Glu Glu Glu Phe Val Glu Tyr Lys Asn Arg Asp Ala Ile Ser			
995	1000	1005	
Ala Leu Met Pro Leu Phe Ser Glu Glu Glu Ser Ser Asp Gly Ser Lys			
1010	1015	1020	
His Asn Asn Gly Leu Pro Asp His Ile Ser Ala Gln Leu Gln Asn Thr			
1025	1030	1035	1040
Tyr Thr Leu Lys Ala Phe Thr Val Gly Ser Lys Cys Val Val Trp Ser			
1045	1050	1055	
Ser Leu Arg Asn Thr Trp Ser Lys Cys Glu Ile Leu Glu Thr Ala Glu			
1060	1065	1070	
Glu Gly Thr Arg Lys Arg Gly Leu Glu Val Met Glu Ile			
1075	1080	1085	

&lt;210&gt; 3744

&lt;211&gt; 1060

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3744

Met Gly Asn Ser Ile Thr Tyr Arg Asp Gln Ala Ala Val Glu Asn His  
 1 5 10 15  
 Leu Glu Gln Arg Leu His Gln Pro Gln Lys Leu Leu Glu Asp Leu Arg  
 20 25 30  
 Lys Thr Asp Ala Gln Gln Phe Arg Thr Ala Met Lys Cys Leu Leu Glu  
 35 40 45  
 Asp Lys Lys Asp Gly Leu Asp Leu Lys Asp Ile Ile Ile Asp Leu Gly  
 50 55 60  
 Glu Ile Arg Glu Arg Ala Leu Gln Ser Pro Gly Val Asn Arg Ser Leu  
 65 70 75 80  
 Phe Leu Ile Thr Leu Glu Arg Cys Phe Gln Met Leu Asn Ser Leu Glu  
 85 90 95  
 Cys Val Glu Ile Leu Gly Lys Val Leu Arg Gly Ser Ser Gly Ser Phe  
 100 105 110  
 Leu Gln Pro Asp Ile Thr Glu Arg Leu Pro Arg Asp Leu Arg Glu Asp  
 115 120 125  
 Ala Phe Lys Asn Leu Ser Ala Val Phe Lys Asp Leu Tyr Asp Lys Thr  
 130 135 140  
 Ser Ala His Ser Gln Arg Ala Leu Tyr Ser Trp Met Thr Gly Ile Leu  
 145 150 155 160  
 Gln Thr Ser Ser Asn Ala Thr Asp Asp Ser Ala Ser Trp Val Ser Ala  
 165 170 175  
 Glu His Leu Trp Val Leu Gly Arg Tyr Met Val His Leu Ser Phe Glu  
 180 185 190  
 Glu Ile Thr Lys Ile Ser Pro Ile Glu Ile Gly Leu Phe Ile Ser Tyr  
 195 200 205  
 Asp Asn Ala Thr Lys Gln Leu Asp Met Val Tyr Asp Ile Thr Pro Glu  
 210 215 220  
 Leu Ala Gln Ala Phe Leu Glu Arg Ile Ser Ser Ser Asn Phe Asn Met  
 225 230 235 240  
 Arg Asn Thr Ser Thr Ile His Arg Leu Gly Leu Leu Val Cys Phe Tyr  
 245 250 255  
 Asn Asp Leu Glu Leu Leu Asp Ala Thr Val Ala Gln Val Leu Leu Tyr  
 260 265 270  
 Gln Met Ile Lys Cys Ser His Leu Arg Gly Phe Gln Ala Gly Val Gln

275	280	285
Lys Leu Lys Ala Glu Leu Leu Asp Ile Ala Met Glu Asn Gln Thr Leu		
290	295	300
Asn Glu Thr Leu Gly Ser Leu Ser Asp Ala Val Val Gly Leu Thr Tyr		
305	310	315
Ser Gln Leu Glu Ser Leu Ser Pro Glu Ala Val His Gly Ala Ile Ser		
325	330	335
Thr Leu Asn Gln Val Ser Gly Trp Ala Lys Ser Gln Val Ile Ile Leu		
340	345	350
Ser Ala Lys Tyr Leu Ala His Glu Lys Val Leu Ser Phe Tyr Asn Val		
355	360	365
Ser Gln Met Gly Ala Leu Leu Ala Gly Val Ser Thr Gln Ala Phe Cys		
370	375	380
Ser Met Lys Arg Lys Asp Ile Ser Gln Val Leu Arg Ser Ala Val Ser		
385	390	395
Gln Tyr Val Ser Asp Leu Ser Pro Ala Gln Gln Gln Gly Ile Leu Ser		
405	410	415
Lys Met Val Gln Ala Glu Asp Thr Ala Pro Gly Ile Val Glu Ile Gln		
420	425	430
Gly Ala Phe Phe Lys Glu Val Ser Leu Phe Asp Leu Arg Arg Gln Pro		
435	440	445
Gly Phe Asn Ser Thr Val Leu Lys Asp Lys Glu Leu Gly Arg Ser Gln		
450	455	460
Ala Leu Phe Leu Tyr Glu Leu Leu Leu Lys Thr Thr Arg Arg Pro Glu		
465	470	475
Glu Leu Leu Ser Ala Gly Gln Leu Val Lys Gly Val Thr Cys Ser His		
485	490	495
Ile Asp Ala Met Ser Thr Asp Phe Phe Leu Ala His Phe Gln Asp Phe		
500	505	510
Gln Asn Asn Phe Ala Leu Leu Ser Pro Tyr Gln Val Asn Cys Leu Ala		
515	520	525
Trp Lys Tyr Trp Glu Val Ser Arg Leu Ser Met Pro Pro Phe Leu Leu		
530	535	540
Ala Ala Leu Pro Ala Arg Tyr Leu Ala Ser Val Pro Ala Ser Gln Cys		
545	550	555
		560

Val	Pro	Phe	Leu	Ile	Ser	Leu	Gly	Lys	Ser	Trp	Leu	Asp	Ser	Leu	Val	
565					570					575						
Leu	Asp	Ser	His	Lys	Lys	Thr	Ser	Val	Leu	Arg	Lys	Val	Gln	Gln	Cys	
580					585					590						
Leu	Asp	Asp	Ser	Ile	Ala	Asp	Glu	Tyr	Thr	Val	Asp	Ile	Met	Gly	Asn	
595					600					605						
Leu	Leu	Cys	His	Leu	Pro	Ala	Ala	Ile	Ile	Asp	Arg	Gly	Ile	Ser	Pro	
610					615					620						
Arg	Ala	Trp	Ala	Thr	Ala	Leu	His	Gly	Leu	Arg	Asp	Cys	Pro	Asp	Leu	
625					630					635					640	
Asn	Pro	Glu	Gln	Lys	Ala	Ala	Val	Arg	Leu	Lys	Leu	Leu	Gly	Gln	Tyr	
645					650					655						
Gly	Leu	Pro	Gln	His	Trp	Thr	Ala	Glu	Thr	Thr	Lys	Asp	Leu	Gly	Pro	
660					665					670						
Phe	Leu	Val	Leu	Phe	Ser	Gly	Asp	Glu	Leu	Ser	Ser	Ile	Ala	Thr	Lys	
675					680					685						
Phe	Pro	Glu	Ile	Leu	Leu	Gln	Ala	Ala	Ser	Lys	Met	Ala	Arg	Thr	Leu	
690					695					700						
Pro	Thr	Lys	Glu	Phe	Leu	Trp	Ala	Val	Phe	Gln	Ser	Val	Arg	Asn	Ser	
705					710					715					720	
Ser	Asp	Lys	Ile	Pro	Ser	Tyr	Asp	Pro	Met	Pro	Gly	Cys	His	Gly	Val	
725					730					735						
Val	Ala	Pro	Ser	Ser	Asp	Asp	Ile	Phe	Lys	Leu	Ala	Glu	Ala	Asn	Ala	
740					745					750						
Cys	Trp	Ala	Leu	Glu	Asp	Leu	Arg	Cys	Met	Glu	Glu	Asp	Thr	Phe	Ile	
755					760					765						
Arg	Thr	Val	Glu	Leu	Leu	Gly	Ala	Val	Gln	Gly	Phe	Ser	Arg	Pro	Gln	
770					775					780						
Leu	Met	Thr	Leu	Lys	Glu	Lys	Ala	Ile	Gln	Val	Trp	Asp	Met	Pro	Ser	
785					790					795					800	
Tyr	Trp	Arg	Glu	His	His	Ile	Val	Ser	Leu	Gly	Arg	Ile	Ala	Leu	Ala	
805					810					815						
Leu	Asn	Glu	Ser	Glu	Leu	Glu	Gln	Leu	Asp	Leu	Ser	Ser	Ile	Asp	Thr	
820					825					830						
Val	Ala	Ser	Leu	Ser	Trp	Gln	Thr	Glu	Trp	Thr	Pro	Gly	Gln	Ala	Glu	
835					840					845						

Ser Ile Leu Gln Gly Tyr Leu Asp Asp Ser Gly Tyr Ser Ile Gln Asp  
 850 855 860  
 Leu Lys Ser Phe His Leu Val Gly Leu Gly Ala Thr Leu Cys Ala Ile  
 865 870 875 880  
 Asn Ile Thr Glu Ile Pro Leu Ile Lys Ile Ser Glu Phe Arg Val Val  
 885 890 895  
 Val Ala Arg Ile Gly Thr Leu Leu Cys Ser Thr His Val Leu Ala Glu  
 900 905 910  
 Phe Lys Arg Lys Ala Glu Val Val Phe Gly Asp Pro Thr Glu Trp Thr  
 915 920 925  
 Ser Ser Val Leu Gln Glu Leu Gly Thr Ile Ala Ala Gly Leu Thr Lys  
 930 935 940  
 Ala Glu Leu Arg Met Leu Asp Lys Asp Leu Met Pro Tyr Phe Gln Pro  
 945 950 955 960  
 Ser Ala Ile Lys Cys Leu Pro Asp Glu Ile Phe Lys Glu Leu Ser Ala  
 965 970 975  
 Glu Gln Ile Ala Ser Leu Gly Pro Glu Asn Ala Ala Ala Val Thr His  
 980 985 990  
 Ala Gln Arg Arg Arg Leu Ser Pro Leu Gln Leu Gln Ser Leu Gln Gln  
 995 1000 1005  
 Ala Leu Asp Gly Ala Lys Thr His Ser Trp Gln Asp Ala Pro Ala Ser  
 1010 1015 1020  
 Ala Gly Pro Thr Arg Thr Ser Ser Ser Arg Ser Pro Ala Gly Ala Leu  
 1025 1030 1035 1040  
 Gln Ser Trp Gly Leu Trp Leu Gly Cys Pro Leu Leu Val Leu Met Ala  
 1045 1050 1055  
 Lys Leu Leu Trp  
 1060

<210> 3745

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3745

Met Gly Lys Asn Val Ser Lys Ala Val Glu His Ile Asn Lys Thr Ile  
 1 5 10 15  
 Glu Pro Ala Leu Ile Ser Lys His Leu Asn Val Ile Glu Gln Lys Arg  
 20 25 30  
 Ile Asp Lys Leu Met Ile Glu Thr Val Asp Pro Asp Asn Arg Ser Lys  
 35 40 45  
 Phe Gly Val Asn Ile Ile Leu Gly Ile Ser Phe Ala Val Cys Lys Ala  
 50 55 60  
 Gly Ala Ala Glu Lys Gly Phe Ser Leu Leu Ser Gln Asn Cys Glu Phe  
 65 70 75 80  
 Ala Gly Asn Ser Glu Gly Ile Leu Leu Val Pro Ala Phe Thr Val Thr  
 85 90 95  
 Ser Asn Gly Ser Gln Ser Gly Asn Lys Leu Ala Val  
 100 105 .

<210> 3746

<211> 1557

<212> PRT

<213> Homo sapiens

<400> 3746

Met Gln Asn Ile Pro Phe Pro Ser Pro Gln Arg Pro Arg Ile Leu Val  
 1 5 10 15  
 Gln Leu Ser Val His Asp Ala Leu Ile Leu Ser Gln Pro Val Ser Thr  
 20 25 30  
 Pro Leu Pro Leu Ser Gly Ala Asn Phe Ser Thr Leu Leu Met Asn Leu  
 35 40 45  
 Gly Pro Glu Asn Cys Ala Thr Leu Leu Leu Phe Val Leu Leu Glu Ser  
 50 55 60  
 Lys Ile Leu Leu His Ser Leu Arg Pro Ala Val Leu Thr Gly Val Ala  
 65 70 75 80  
 Glu Ala Val Val Ala Met Ile Phe Pro Phe Gln Trp Gln Cys Pro Tyr  
 85 90 95  
 Ile Pro Leu Cys Pro Leu Ser Leu Ala Ala Val Leu Ser Ala Pro Leu  
 100 105 110

Pro Phe Ile Val Gly Val Asp Ser Arg Tyr Phe Asp Leu His Asp Pro  
 115 120 125  
 Pro Gln Asp Val Val Cys Ile Asp Leu Asp Thr Asn Met Leu Tyr Val  
 130 135 140  
 Ser Asp Glu Lys Lys Asn Met Asn Trp Lys Gln Leu Pro Lys Lys Pro  
 145 150 155 160  
 Cys Lys Asn Leu Leu Ser Thr Leu Lys Lys Leu Tyr Pro Gln Leu Ser  
 165 170 175  
 Ser Val His Gln Lys Thr Gln Glu Gly Ser Ala Ile Asp Met Thr Pro  
 180 185 190  
 Ile Glu Ala Asp Phe Ser Trp Gln Lys Lys Met Thr Gln Leu Glu Met  
 195 200 205  
 Glu Ile Gln Glu Ala Phe Leu Arg Phe Met Ala Ser Ile Leu Lys Gly  
 210 215 220  
 Tyr Arg Thr Tyr Leu Arg Pro Ile Thr Glu Ala Pro Ser Asn Lys Ala  
 225 230 235 240  
 Thr Ala Ala Asp Ser Leu Phe Asp Arg Gln Gly Phe Leu Lys Ser Arg  
 245 250 255  
 Asp Arg Ala Tyr Ala Lys Phe Tyr Thr Leu Leu Ser Lys Thr Gln Ile  
 260 265 270  
 Phe Ile Arg Phe Ile Glu Glu Cys Ser Phe Val Ser Asp Lys Asp Thr  
 275 280 285  
 Gly Leu Ala Phe Phe Asp Asp Cys Ile Glu Lys Leu Phe Pro Asp Lys  
 290 295 300  
 Gly Thr Glu Lys Thr Asp Lys Val Asp Phe Asp Ser Ala Glu Asp Thr  
 305 310 315 320  
 Arg Leu Ile Glu Leu Asp Asp Ser Gln Lys Gly Glu His Thr Val Phe  
 325 330 335  
 Ile Met Pro Pro Glu Pro Pro Pro Asp Asp Gly Lys Asp Leu Ser Pro  
 340 345 350  
 Lys Tyr Ser Tyr Lys Tyr Phe Pro Arg Leu Asp Leu Lys Leu Phe Asp  
 355 360 365  
 Arg Pro Gln Glu Leu Lys Leu Cys Phe Ser Arg His Pro Thr Gly Asn  
 370 375 380  
 Ser Ile Thr Lys Ser Pro Pro Leu Met Ala Lys Arg Thr Lys Gln Glu  
 385 390 395 400



Ile Lys Thr Ala His Lys Leu Ala Lys Arg Cys Tyr Thr Asn Pro Pro			
405	410	415	
Gln Trp Ala Lys Cys Leu Phe Ser His Cys Tyr Ser Leu Trp Phe Ile			
420	425	430	
Cys Leu Pro Ala Tyr Val Arg Val Ser His Pro Lys Val Arg Ala Leu			
435	440	445	
Gln Gln Ala Tyr Asp Val Leu Ile Lys Met Arg Lys Thr Asp Val Asp			
450	455	460	
Pro Leu Asp Glu Val Cys Tyr Arg Val Val Met Gln Leu Cys Gly Leu			
465	470	475	480
Trp Gly His Pro Val Leu Ala Val Arg Val Leu Phe Glu Met Lys Thr			
485	490	495	
Ala Arg Ile Lys Pro Asn Ala Ile Thr Tyr Gly Tyr Tyr Asn Lys Val			
500	505	510	
Val Leu Glu Ser Pro Trp Pro Ser Ser Thr Arg Ser Gly Ile Phe Leu			
515	520	525	
Trp Thr Lys Val Arg Asn Val Val Arg Gly Leu Ala Gln Phe Arg Gln			
530	535	540	
Pro Leu Lys Lys Thr Val Gln Arg Ser Gln Val Ser Ser Ile Ser Gly			
545	550	555	560
Gly Gln Ser Asp Gln Gly Tyr Gly Ser Lys Asp Glu Leu Ile Lys Asp			
565	570	575	
Asp Ala Glu Ile His Val Pro Glu Glu Gln Ala Ala Arg Glu Leu Ile			
580	585	590	
Thr Lys Thr Lys Met Gln Thr Glu Glu Val Cys Asp Ala Ser Ala Ile			
595	600	605	
Val Ala Lys His Ser Gln Pro Ser Pro Glu Pro His Ser Pro Thr Glu			
610	615	620	
Pro Pro Ala Trp Gly Ser Ser Ile Val Lys Val Pro Ser Gly Ile Phe			
625	630	635	640
Asp Val Asn Ser Arg Lys Ser Ser Thr Gly Ser Ile Ser Asn Val Leu			
645	650	655	
Phe Ser Thr Gln Asp Pro Val Glu Asp Ala Val Phe Gly Glu Ala Thr			
660	665	670	
Asn Leu Lys Lys Asn Gly Asp Arg Gly Glu Lys Arg Gln Lys His Phe			
675	680	685	

Pro Glu Arg Ser Cys Ser Phe Ser Ser Glu Ser Arg Ala Gly Met Leu  
 690 695 700  
 Leu Lys Lys Ser Ser Leu Asp Ser Asn Ser Ser Glu Met Ala Ile Met  
 705 710 715 720  
 Met Gly Ala Asp Ala Lys Ile Leu Thr Ala Ala Leu Thr Cys Pro Lys  
 725 730 735  
 Thr Ser Leu Leu His Ile Ala Arg Thr His Ser Phe Glu Asn Val Ser  
 740 745 750  
 Cys His Leu Pro Asp Ser Arg Thr Cys Met Ser Glu Ser Thr Trp Asn  
 755 760 765  
 Pro Glu His Arg Ser Ser Pro Val Pro Glu Met Leu Glu Glu Ser Gln  
 770 775 780  
 Glu Leu Leu Glu Pro Val Val Asp Asp Val Pro Lys Thr Thr Ala Thr  
 785 790 795 800  
 Val Asp Thr Tyr Glu Ser Leu Leu Ser Asp Ser Asn Ser Asn Gln Ser  
 805 810 815  
 Arg Asp Leu Lys Thr Val Ser Lys Asp Leu Arg Asn Lys Arg Ser Ser  
 820 825 830  
 Leu Tyr Gly Ile Ala Lys Val Val Gln Arg Glu Asp Val Glu Thr Gly  
 835 840 845  
 Leu Asp Pro Leu Ser Leu Leu Ala Thr Glu Cys Thr Gly Gly Lys Thr  
 850 855 860  
 Pro Asp Ser Glu Asp Lys Leu Phe Ser Pro Val Ile Ala Arg Asn Leu  
 865 870 875 880  
 Ala Asp Glu Ile Glu Ser Tyr Met Asn Leu Lys Ser Pro Leu Gly Ser  
 885 890 895  
 Lys Ser Ser Ser Met Glu Leu His Arg Glu Glu Asn Arg`Glu Ser Gly  
 900 905 910  
 Met Thr Thr Ala Phe Ile His Ala Leu Glu Arg Arg Ser Ser Leu Pro  
 915 920 925  
 Leu Asp His Gly Ser Pro Ala Gln Glu Asn Pro Glu Ser Glu Lys Ser  
 930 935 940  
 Ser Pro Ala Val Ser Arg Ser Lys Thr Phe Thr Gly Arg Phe Lys Gln  
 945 950 955 960  
 Gln Thr Pro Ser Arg Thr His Lys Glu Arg Ser Thr Ser Leu Ser Ala  
 965 970 975

Leu Val Arg Ser Ser Pro His Gly Ser Leu Gly Ser Val Val Asn Ser  
 980 985 990  
 Leu Ser Gly Leu Lys Leu Asp Asn Ile Leu Ser Gly Pro Lys Ile Asp  
 995 1000 1005  
 Val Leu Lys Ser Gly Met Lys Gln Ala Ala Thr Val Ala Ser Lys Met  
 1010 1015 1020  
 Trp Val Ala Val Ala Ser Ala Tyr Ser Tyr Ser Asp Asp Glu Glu Glu  
 1025 1030 1035 1040  
 Thr Asn Arg Asp Tyr Ser Phe Pro Ala Gly Leu Glu Asp His Ile Leu  
 1045 1050 1055  
 Gly Glu Asn Ile Ser Pro Asn Thr Ser Ile Ser Gly Leu Val Pro Ser  
 1060 1065 1070  
 Glu Leu Thr Gln Ser Asn Thr Ser Leu Gly Ser Ser Ser Ser Gly  
 1075 1080 1085  
 Asp Val Gly Lys Leu His Tyr Pro Thr Gly Glu Val Pro Phe Pro Arg  
 1090 1095 1100  
 Gly Met Lys Gly Gln Asp Phe Glu Lys Ser Asp His Gly Ser Ser Gln  
 1105 1110 1115 1120  
 Asn Thr Ser Met Ser Ser Ile Tyr Gln Asn Cys Ala Met Glu Val Leu  
 1125 1130 1135  
 Met Ser Ser Cys Ser Gln Cys Arg Ala Cys Gly Ala Leu Val Tyr Asp  
 1140 1145 1150  
 Glu Glu Ile Met Ala Gly Trp Thr Ala Asp Asp Ser Asn Leu Asn Thr  
 1155 1160 1165  
 Ala Cys Pro Phe Cys Lys Ser Asn Phe Leu Pro Leu Leu Asn Ile Glu  
 1170 1175 1180  
 Phe Lys Asp Leu Arg Gly Ser Ala Ser Phe Phe Leu Lys Pro Ser Thr  
 1185 1190 1195 1200  
 Ser Gly Asp Ser Leu Gln Ser Gly Ser Ile Pro Leu Ala Asn Glu Ser  
 1205 1210 1215  
 Leu Glu His Lys Pro Val Ser Ser Leu Ala Glu Pro Asp Leu Ile Asn  
 1220 1225 1230  
 Phe Met Asp Phe Pro Lys His Asn Gln Ile Ile Thr Glu Glu Thr Gly  
 1235 1240 1245  
 Ser Ala Val Glu Pro Ser Asp Glu Ile Lys Arg Ala Ser Gly Asp Val  
 1250 1255 1260

Gln Thr Met Lys Ile Ser Ser Val Pro Asn Ser Leu Ser Lys Arg Asn  
 1265                      1270                      1275                      1280  
 Val Ser Leu Thr Arg Ser His Ser Val Gly Gly Pro Leu Gln Asn Ile  
                          1285                      1290                      1295  
 Asp Phe Thr Gln Arg Pro Phe His Gly Ile Ser Thr Val Ser Leu Pro  
                          1300                      1305                      1310  
 Asn Ser Leu Gln Glu Val Val Asp Pro Leu Gly Lys Arg Pro Asn Pro  
                          1315                      1320                      1325  
 Pro Pro Val Ser Val Pro Tyr Leu Ser Pro Leu Val Leu Arg Lys Glu  
                          1330                      1335                      1340  
 Leu Glu Ser Leu Leu Glu Asn Glu Gly Asp Gln Val Ile His Thr Ser  
 1345                      1350                      1355                      1360  
 Ser Phe Ile Asn Gln His Pro Ile Ile Phe Trp Asn Leu Val Trp Tyr  
                          1365                      1370                      1375  
 Phe Arg Arg Leu Asp Leu Pro Ser Asn Leu Pro Gly Leu Ile Leu Thr  
                          1380                      1385                      1390  
 Ser Glu His Cys Asn Glu Gly Val Gln Leu Pro Leu Ser Ser Leu Ser  
                          1395                      1400                      1405  
 Gln Asp Ser Lys Leu Val Tyr Ile Gln Leu Leu Trp Asp Asn Ile Asn  
                          1410                      1415                      1420  
 Leu His Gln Glu Pro Arg Glu Pro Leu Tyr Val Ser Trp Arg Asn Phe  
 1425                      1430                      1435                      1440  
 Asn Ser Glu Lys Lys Ser Ser Leu Leu Ser Glu Glu Gln Gln Glu Thr  
                          1445                      1450                      1455  
 Ser Thr Leu Val Glu Thr Ile Arg Gln Ser Ile Gln His Asn Asn Val  
                          1460                      1465                      1470  
 Leu Lys Pro Ile Asn Leu Leu Ser Gln Gln Met Lys Pro Gly Met Lys  
                          1475                      1480                      1485  
 Arg Gln Arg Ser Leu Tyr Arg Glu Ile Leu Phe Leu Ser Leu Val Ser  
                          1490                      1495                      1500  
 Leu Gly Arg Glu Asn Ile Asp Ile Glu Ala Phe Asp Asn Glu Tyr Gly  
 1505                      1510                      1515                      1520  
 Ile Ala Tyr Asn Ser Leu Ser Ser Glu Ile Leu Glu Arg Leu Gln Lys  
                          1525                      1530                      1535  
 Ile Asp Ala Pro Pro Ser Ala Ser Val Glu Trp Cys Arg Lys Cys Phe  
                          1540                      1545                      1550

Gly Ala Pro Leu Ile

1555

<210> 3747

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3747

Met	Tyr	Val	Phe	Gln	Leu	Phe	Asp	Tyr	Tyr	Ser	Ala	Ser	Gly	Thr	Thr
1				5					10					15	
Leu	Leu	Trp	Gln	Ala	Phe	Trp	Glu	Cys	Val	Val	Val	Val	Trp	Val	Tyr
			20					25					30		
Gly	Ala	Asp	Arg	Phe	Thr	Asp	Asp	Ile	Ala	Cys	Met	Ile	Gly	Tyr	Arg
		35					40					45			
Pro	Cys	Pro	Trp	Met	Lys	Trp	Cys	Trp	Ser	Phe	Phe	Thr	Pro	Leu	Val
	50				55						60				
Cys	Met	Gly	Ile	Phe	Ile	Phe	Asn	Val	Val	Tyr	Tyr	Lys	Pro	Leu	Val
65				70						75				80	
Tyr	Lys	Asn	Thr	Asn	Val	Tyr	Pro	Trp	Trp	Gly	Glu	Ala	Met	Gly	Trp
			85						90					95	
Ala	Phe	Val	Leu	Ser	Ser	Met	Leu	Cys	Met	Pro	Leu	His	Leu	Leu	Gly
		100						105				110			
Cys	Leu	Leu	Arg	Ala	Lys	Gly	Thr	Met	Ala	Glu	Cys	Trp	Lys	His	Leu
	115						120					125			
Thr	Gln	Pro	Ile	Trp	Gly	Leu	His	His	Leu	Glu	Tyr	Arg	Ala	Gln	Asp
	130					135						140			
Ala	Asp	Val	Arg	Gly	Leu	Thr	Thr	Leu	Thr	Pro	Val	Ser	Glu	Ser	Ser
145			150							155				160	
Lys	Val	Val	Val	Val	Glu	Ser	Val	Met	Gly	Gln	Leu	Ser	Ser	His	His
			165						170					175	
Gln	Leu	Thr	Ser	Gly	Leu	Trp	Gly	Lys	Arg	Leu	Gln	Tyr	Ser	Ile	Leu
	180							185					190		
Gly	Val	Trp	Ala	Ala	Asn	Leu	Ala	Cys	Ser	Gly	Phe	Pro	Pro	Cys	Ala
	195					200						205			

Leu Gly Trp Ala His Pro Arg Glu Gly Thr Pro Asp Thr Ala Pro Thr  
 210 215 220  
 Ser Arg Leu Lys Ala Asp Ala Leu Pro Ala Pro Pro Val Phe Cys Val  
 225 230 235 240  
 Ala Ala Leu Thr His Val Cys Leu Ser Arg Pro Val Pro Arg Arg Leu  
 245 250 255  
 Ser Asp Pro Lys Lys Gly Phe Pro Asp Thr Arg Thr Glu Ala Gly Gly  
 260 265 270  
 Leu Gly Leu Gly Glu Gly Gly Gly Pro Ala Gly Thr Phe Leu Leu Cys  
 275 280 285

<210> 3748

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3748

Met Val Ser Val Phe Arg Ser Cys Asp Leu Pro Thr Leu Ala Ser Gln  
 1 5 10 15  
 Arg Ala Gly Ile Ile Gly Val Ser His Cys Ala Arg Pro Thr Val Arg  
 20 25 30  
 Phe Phe Leu Phe Leu Phe Phe Phe Phe Glu Met Glu Ser Ser Ser Val  
 35 40 45  
 Thr Arg Leu Glu Cys Ser Asp Val Ile Ser Ala His His Asn Leu Arg  
 50 55 60  
 Pro Pro Gly Ser Ser Asp Ser Pro Ala Leu Asp Ser Gln Val Ala Arg  
 65 70 75 80  
 Ile Thr Gly Met Arg His His Thr Gln Leu Ile Phe Val Phe Leu Val  
 85 90 95  
 Glu Thr Gly Phe His His Ile Gly Gln Asp Gly Leu His Leu Leu Thr  
 100 105 110  
 Ser

&lt;210&gt; 3749

&lt;211&gt; 1445

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3749

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Met Gly Asn Leu Val Ile Pro Leu Gly Lys Gly Arg Ala Gly Arg Val
  1             5             10             15
Glu Ser Gly Gln Arg Ile Pro Pro Pro Ala Pro Arg Pro Ser Val Glu
      20             25             30
Cys Thr Gly Asp Asp Ile Ala Leu Gln Met Glu Lys Met Leu Phe Pro
      35             40             45
Leu Lys Ser Pro Ser Ala Thr Trp Leu Ser Pro Ser Ser Thr Pro Trp
      50             55             60
Met Met Asp Phe Ile Leu Thr Ser Val Cys Gly Leu Val Leu Leu Phe
      65             70             75             80
Leu Leu Leu Leu Tyr Val His Ser Asp Pro Pro Ser Pro Pro Pro Gly
      85             90             95
Arg Lys Arg Ser Ser Arg Glu Pro Gln Arg Glu Arg Ser Gly Arg Ser
      100            105            110
Arg Ser Arg Lys Ile Ser Ala Leu Lys Ala Cys Arg Ile Leu Leu Arg
      115            120            125
Glu Leu Glu Glu Thr Arg Asp Leu Asn Tyr Leu Leu Glu Ser His Leu
      130            135            140
Arg Lys Leu Ala Gly Glu Gly Ser Ser His Leu Pro Leu Gly Gly Asp
      145            150            155            160
Pro Leu Gly Asp Val Cys Lys Pro Val Pro Ala Lys Ala His Gln Pro
      165            170            175
His Gly Lys Cys Met Gln Asp Pro Ser Pro Ala Ser Leu Ser Pro Pro
      180            185            190
Ala Pro Pro Ala Pro Leu Ala Ser Thr Leu Ser Pro Gly Pro Met Thr
      195            200            205
Phe Ser Glu Pro Phe Gly Pro His Ser Thr Leu Ser Ala Ser Gly Pro
      210            215            220

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• Pro Glu Pro Leu Leu Pro Leu Lys Cys Pro Ala Thr Gln Pro His Val

225	230	235	240
Val Phe Pro Pro Ser	Pro Gln Pro His Gly	Pro Leu Ala Ser Ser	Pro
245	250	255	
Pro Pro Pro Asp Ser	Ser Leu Ala Gly Leu Gln Cys Gly	Ser Thr Thr	
260	265	270	
Cys Pro Val Pro Gln	Ser Ser Pro Leu His Asn Gln Val Leu	Pro Pro	
275	280	285	
Pro Thr Arg Val Ile	Ser Gly Leu Gly Cys Ser Ser Asp	Pro Ile Trp	
290	295	300	
Asp Leu Tyr Cys Trp	Arg Glu Ala Ala Thr Thr Trp Gly Leu Ser	Thr	
305	310	315	320
Tyr Ser His Gly Lys	Ser Gln Pro Arg His Leu Pro Asp His	Pro Ser	
325	330	335	
Glu Ala Ser Phe Trp	Gly Asp Pro Thr Pro Lys His Met Glu Val Gly		
340	345	350	
Gly Cys Thr Phe Ile	His Pro Asp Val Gln Lys Leu Leu Glu Thr	Leu	
355	360	365	
Ile Ala Lys Arg Ala	Leu Met Lys Met Trp Gln Glu Lys Glu Arg	Lys	
370	375	380	
Arg Ala Asp His Pro	His Met Thr Ser Leu Gly Lys Glu Trp Asp	Ile	
385	390	395	400
Thr Thr Leu Asn Pro	Phe Trp Asn Val Ser Thr Gln Pro Gln Gln	Leu	
405	410	415	
Pro Arg Pro Gln Gln	Val Ser Asp Ala Thr Thr Val Gly Asn His	Leu	
420	425	430	
Gln Gln Lys Arg Ser	Gln Leu Phe Trp Asp Leu Pro Ser Leu Asn	Ser	
435	440	445	
Glu Ser Leu Ala Thr	Thr Val Trp Val Ser Arg Asn Pro Ser Ser	Gln	
450	455	460	
Asn Ala His Ser Val	Pro Leu Asp Lys Ala Ser Thr Ser Leu Pro	Gly	
465	470	475	480
Glu Pro Glu Val Glu	Ala Ser Ser Gln Leu Ser Gln Ala Pro Pro	Gln	
485	490	495	
Pro His His Met Ala	Gln Pro Gln His Phe Thr Pro Ala Trp Pro	Gln	
500	505	510	
Ser Gln Pro Pro Pro	Leu Ala Glu Ile Gln Thr Gln Ala His	Leu Ser	



515	520	525
Pro Pro Val Pro Ser Leu Gly Cys Ser Ser Pro Pro Gln Ile Arg Gly		
530	535	540
Cys Gly Ala Ser Tyr Pro Thr Ser Gln Glu Arg Thr Gln Ser Val Ile		
545	550	555
Pro Thr Gly Lys Glu Tyr Leu Glu Trp Pro Leu Lys Lys Arg Pro Lys		
565	570	575
Trp Lys Arg Val Leu Pro Ser Leu Leu Lys Lys Ser Gln Ala Val Leu		
580	585	590
Ser Gln Pro Thr Ala His Leu Pro Gln Glu Arg Pro Ala Ser Trp Ser		
595	600	605
Pro Lys Ser Ala Pro Ile Leu Pro Gly Val Val Thr Ser Pro Glu Leu		
610	615	620
Pro Glu His Trp Trp Gln Gly Arg Asn Ala Ile His Gln Glu Gln Ser		
625	630	635
Cys Gly Pro Pro Ser Arg Leu Gln Ala Ser Gly Asp Leu Leu Gln Pro		
645	650	655
Asp Gly Glu Phe Pro Gly Arg Pro Gln Ser Gln Ala Glu Asp Thr Gln		
660	665	670
Gln Ala Leu Leu Pro Ser Gln Pro Ser Glu Phe Ala Gly Lys Gly Arg		
675	680	685
Lys Asp Val Gln Lys Thr Gly Phe Arg Ser Ser Gly Arg Phe Ser Asp		
690	695	700
Lys Gly Cys Leu Gly Ser Lys Leu Gly Pro Asp Pro Ser Arg Asp Gln		
705	710	715
Gly Ser Gly Arg Thr Ser Val Lys Ala Leu Asp Glu Asp Lys Glu Ala		
725	730	735
Glu Gly Asp Leu Arg Arg Ser Trp Lys Tyr Gln Ser Val Ser Ser Thr		
740	745	750
Pro Arg Asp Pro Asp Lys Glu His Leu Glu Asn Lys Leu Gln Ile His		
755	760	765
Leu Ala Arg Lys Val Gly Glu Ile Lys Glu Gly Trp Ile Pro Met Pro		
770	775	780
Val Arg Arg Ser Trp Leu Met Ala Lys Cys Ala Val Pro Lys Ser Asp		
785	790	795
Thr His Arg Lys Pro Glu Lys Leu Ala Ser Trp Arg Gly Gly Lys Ala		

	805		810		815
His Val Asn Thr Ser Gln Glu Leu Ser Phe Leu His Pro Cys Thr Gln					
	820		825		830
Gln Ile Leu Glu Val His Leu Val Arg Phe Cys Val Arg His Ser Trp					
	835		840		845
Gly Thr Asp Leu Gln Ser Leu Glu Pro Ile Asn Val Trp Ser Gly Glu					
	850		855		860
Ala Gln Ala Pro Pro Phe Pro Gln Ser Thr Phe Thr Pro Trp Ala Ser					
865		870		875	880
Trp Val Ser Arg Val Glu Ser Val Pro Lys Val Pro Ile Phe Leu Gly					
	885		890		895
Lys Arg Pro Gln Ser Gly Pro Gly Asp Asn Arg Thr Thr Ser Lys Ser					
	900		905		910
Val Pro Thr Val Ser Gly Pro Leu Ala Ala Pro Pro Pro Glu Gln Glu					
	915		920		925
Gly Val Gln Arg Pro Pro Arg Gly Ser Gln Ser Ala Asp Thr His Gly					
	930		935		940
Arg Ser Glu Ala Phe Pro Thr Gly His Lys Gly Arg Gly Cys Ser Gln					
945		950		955	960
Pro Pro Thr Cys Ser Leu Val Gly Arg Thr Trp Gln Ser Arg Thr Val					
	965		970		975
Leu Glu Ser Gly Lys Pro Lys Pro Arg Leu Glu Gly Ser Met Gly Ser					
	980		985		990
Glu Met Ala Gly Asn Glu Ala Trp Leu Glu Ser Glu Ser Met Ser Pro					
	995		1000		1005
Gly Asp Pro Cys Ser Ser Arg Ala Leu Gln Glu Leu Ser Ile Gly Ser					
	1010		1015		1020
Gln Trp Ala Arg Ala Glu Asp Ala Leu Gln Ala Leu Lys Val Gly Glu					
1025		1030		1035	1040
Lys Pro Pro Thr Trp Glu Val Thr Leu Gly Ala Ser Val Arg Ala Ser					
	1045		1050		1055
Ser Gly Ser Val Gln Glu Asp Leu Arg Ser Thr Gly Ala Leu Gly Thr					
	1060		1065		1070
Thr Gly Asn Pro Ser Ala Ser Ser Val Cys Val Ala Gln Asp Pro Glu					
	1075		1080		1085
Gln Leu His Leu Lys Ala Gln Val Val Ser Glu Ile Ala Leu Ile Val					

1090	1095	1100
Gln Val Asp Ser Glu Glu Gln Leu Pro Gly Arg Ala Pro Gly Ile Leu		
1105	1110	1115
Leu Gln Asp Gly Ala Thr Gly Leu Cys Leu Pro Gly Arg His Met Asp		1120
1125	1130	1135
Met Leu Thr Ala Ala Asp Arg Leu Pro Thr Gln Ala Pro Leu Ser Thr		
1140	1145	1150
Ser Gln Ser Val Ser Gly Lys Asn Met Thr Ala Ser Gln Gly Pro Cys		
1155	1160	1165
Ala Leu Leu Trp Lys Gly Gly Asp Ser Pro Gly Gln Gln Glu Pro Gly		
1170	1175	1180
Ser Pro Lys Ala Lys Ala Pro Gln Lys Ser Gln Lys Thr Leu Gly Cys		
1185	1190	1195
Ala Gly Lys Gly Glu Ala His Arg Arg Pro Arg Thr Gly Glu Gln Gly		1200
1205	1210	1215
His Arg Ser Lys Gly Pro Arg Thr Ser Glu Ala Ser Gly Arg Ser His		
1220	1225	1230
Pro Ala Gln Ala Arg Glu Ile Gly Asp Lys Gln Glu Arg Lys Tyr Asn		
1235	1240	1245
Gln Leu Gln Leu Glu Lys Gly Gln Thr Pro Pro Glu Ser His Phe Gln		
1250	1255	1260
Arg Lys Ile Ser His His Pro Gln Gly Leu His Pro Arg Lys Gly Gly		
1265	1270	1275
Thr Arg Trp Glu Asp Val Leu Gln Lys Gly Lys Pro Gly Ala Asp Ala		1280
1285	1290	1295
Phe Gln Ser Trp Gly Ser Gly Pro Pro Arg Gln Phe Met Asp Cys Met		
1300	1305	1310
Ala Asp Lys Ala Trp Thr Ile Ser Arg Val Val Gly Gln Ile Leu Val		
1315	1320	1325
Asp Lys Leu Gly Leu Gln Trp Gly Arg Gly Pro Ser Glu Val Asn Arg		
1330	1335	1340
His Lys Gly Asp Phe His Ala Gln Glu Asn Val Pro Ser Cys Cys His		
1345	1350	1355
Arg Gly His Cys His Gln Glu Arg Ser Arg Glu Met Arg Ala Leu Ala		1360
1365	1370	1375
Cys Ser Pro Lys Ala Thr Pro Lys Gly His His Cys Pro Val Lys Asn		

1380 1385 1390  
 Arg Gly Ile Arg Asp Arg Asp Ser Ser Trp Ala Pro Pro Pro Arg Glu  
 1395 1400 1405  
 Pro Val Ser Pro Ala Gly Pro His His His Arg Pro Arg Met Ala Ser  
 1410 1415 1420  
 Thr Ser Gly Gly Pro His Pro Gln Leu Gln Glu Leu Met Ser Ala Gln  
 1425 1430 1435 1440  
 Arg Cys Leu Ala Ser  
 1445

<210> 3750

<211> 138

<212> PRT

<213> Homo sapiens

<400> 3750

Met Gln Leu Leu Ala Gly Val Lys Leu Cys Thr Gly Arg Thr Leu Thr  
 1 5 10 15  
 Asn His Pro His Tyr Glu Asp Ser Ser Leu Arg Glu Arg Thr Arg Ala  
 20 25 30  
 Val Tyr Gln Ile Tyr Ala Lys Arg Ala Pro Glu Glu Val His Ala Leu  
 35 40 45  
 Leu Arg Ser Phe Gly Thr Asp Tyr Val Ile Leu Glu Asp Ser Ile Cys  
 50 55 60  
 Tyr Glu Arg Arg His Arg Arg Gly Cys Arg Leu Arg Asp Leu Leu Asp  
 65 70 75 80  
 Ile Ala Asn Gly His Met Met Asp Gly Pro Gly Glu Asn Asp Pro Asp  
 85 90 95  
 Leu Lys Pro Ala Asp His Pro Arg Phe Cys Glu Glu Ile Lys Arg Asn  
 100 105 110  
 Leu Pro Pro Tyr Val Ala Tyr Phe Thr Arg Val Phe Gln Asn Lys Thr  
 115 120 125  
 Phe His Val Tyr Lys Leu Ser Arg Asn Lys  
 130 135

&lt;210&gt; 3751

&lt;211&gt; 917

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3751

```

Met Glu Asn Ile Leu Cys Phe Leu Asn Ser Tyr Thr Glu Thr Val Leu
  1              5              10              15
Ser Pro Asp Ser His Cys Leu Asp Ile Asp Leu Asn Phe Ile Cys Leu
          20              25              30
Ser Gly Leu Gly Leu Phe Ile Leu Tyr Leu Phe Tyr Met Val Leu Thr
          35              40              45
Leu Tyr Ser Ser Pro Thr Glu Lys Asn Asn Asp Thr Gln Lys His Gln
          50              55              60
Gly Arg Ala Arg Arg Lys Arg Lys Ser Val Thr Phe Lys Asp Arg Lys
          65              70              75              80
Ser Leu Gln Lys Glu Ala Glu Glu Glu Arg Lys Leu His Ser Phe Leu
          85              90              95
Lys Ser Phe Gly Pro Pro Val Ser Cys Ser Pro Leu Gly Gln His His
          100             105             110
Asp Thr Thr Leu Phe Arg Arg Leu Leu Cys Pro Asp Pro Val Cys Arg
          115             120             125
Val Cys Asn Arg Ala Thr Ala Asp Ile Gln Arg Leu Leu Ser Trp Glu
          130             135             140
Ser Leu Lys Asp Ala Ala Pro Ser Val Ser Pro Leu Ala Ser Ser Ala
          145             150             155             160
Ser Gly Ala Glu Ser Ser Phe Thr Leu Ala Ser Thr Pro Ser Ala Thr
          165             170             175
Thr Pro Glu Asp Leu Ile Leu Ser Ser Arg Pro Lys Pro Ser Pro Pro
          180             185             190
Pro Pro Leu Ile Leu Ser Pro Asp Leu Ile Thr Thr Leu Ala Asp Leu
          195             200             205
Phe Ser Pro Ser Pro Leu Arg Asp Pro Leu Pro Pro Gln Pro Val Ser
          210             215             220
Pro Leu Asp Ser Lys Phe Pro Ile Asp His Ser Pro Pro Gln Gln Leu

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225                      230                      235                      240  
 Pro Phe Pro Leu Leu Pro Pro His His Ile Glu Arg Val Glu Pro Ser  
                          245                      250                      255  
 Leu Gln Pro Glu Ala Ser Leu Ser Leu Asn Thr Ile Phe Ser Phe Gly  
                          260                      265                      270  
 Ser Thr Leu Cys Gln Asp Ile Ser Gln Ala Val Asn Arg Thr Asp Ser  
                          275                      280                      285  
 Cys Ala Arg His His Gly Pro Pro Thr Pro Ser Ala Leu Pro Pro Glu  
                          290                      295                      300  
 Asp Cys Thr Val Thr Gln Ser Lys Ser Asn Leu Thr Val Leu Lys Thr  
 305                      310                      315                      320  
 Phe Pro Glu Met Leu Ser Leu Gly Gly Ser Gly Gly Ser Ser Thr Ser  
                          325                      330                      335  
 Ala Pro Thr Thr Lys Gly Ile Asp His Ser Cys Pro Ala Ser Ser Glu  
                          340                      345                      350  
 Phe Ser Trp Trp Gln Pro His Ala Lys Asp Ser Phe Ser Ser Asn Phe  
                          355                      360                      365  
 Val Pro Ser Asp Phe Met Glu Glu Leu Leu Thr Leu His Ser Ser Glu  
                          370                      375                      380  
 Ala Ser Leu Gly Gly His Ser Val Ala Asn Ile Ile Gln Pro Val Asn  
 385                      390                      395                      400  
 Ile Ser Phe Leu Ser His Asp Ile Pro Ala Leu Leu Glu Arg Gln Val  
                          405                      410                      415  
 Lys Arg Arg Gly Asp Phe Leu Met Trp Lys Glu Asn Gly Lys Lys Pro  
                          420                      425                      430  
 Gly Ser Phe Pro Thr Gln Leu Arg Pro Asn Tyr Gln Leu Asn Ser Ser  
                          435                      440                      445  
 Arg Asn Met Leu Thr Ser Thr Ala Val Lys His Asp Leu Ala Glu Ser  
                          450                      455                      460  
 Phe Pro Phe Trp Ala Ser Lys Gly Lys Leu Glu Trp Gln His Ile His  
 465                      470                      475                      480  
 Gln Gln Pro Pro Tyr Ser Lys Cys Phe Glu Asp His Leu Glu Gln Lys  
                          485                      490                      495  
 Tyr Val Gln Leu Phe Trp Gly Leu Pro Ser Leu His Ser Glu Ser Leu  
                          500                      505                      510  
 His Pro Thr Val Phe Val Gln His Gly Arg Ser Ser Met Phe Val Phe

515	520	525
Phe Asn Gly Ile Thr Asn Thr Ser Met Ser His Glu Ser Pro Val Leu		
530	535	540
Pro Pro Pro Gln Pro Leu Phe Leu Pro Ser Thr Gln Pro Leu Pro Leu		
545	550	555
Pro Gln Thr Leu Pro Arg Gly Gln Ser Leu His Leu Thr Gln Val Lys		
565	570	575
Ser Leu Ala Gln Pro Gln Ser Pro Phe Pro Ala Leu Pro Pro Ser Pro		
580	585	590
Leu Phe Leu Ile Arg Val Cys Gly Val Cys Phe His Arg Pro Gln Asn		
595	600	605
Glu Ala Arg Ser Leu Met Pro Ser Glu Ile Asn His Leu Glu Trp Asn		
610	615	620
Val Leu Gln Lys Val Gln Glu Ser Val Trp Gly Leu Pro Ser Val Val		
625	630	635
Gln Lys Ser Gln Glu Asp Phe Cys Pro Pro Ala Pro Asn Pro Val Leu		
645	650	655
Val Arg Lys Ser Phe Lys Val His Val Pro Ile Ser Ile Ile Pro Gly		
660	665	670
Asp Phe Pro Leu Ser Ser Glu Val Arg Lys Lys Leu Glu Gln His Ile		
675	680	685
Arg Arg Arg Leu Ile Gln Arg Arg Trp Gly Leu Pro Arg Arg Ile His		
690	695	700
Glu Ser Leu Ser Leu Leu Arg Pro Gln Asn Lys Ile Ser Glu Leu Ser		
705	710	715
Val Ser Glu Ser Ile His Gly Pro Leu Asn Ile Ser Leu Val Glu Gly		
725	730	735
Gln Arg Cys Asn Val Leu Lys Lys Ser Ala Ser Ser Phe Pro Arg Ser		
740	745	750
Phe His Glu Arg Ser Ser Asn Met Leu Ser Met Glu Asn Val Gly Asn		
755	760	765
Tyr Gln Gly Cys Ser Gln Glu Thr Ala Pro Lys Asn His Leu Leu His		
770	775	780
Asp Pro Glu Thr Ser Ser Glu Glu Asp Leu Arg Ser Asn Ser Glu Arg		
785	790	795
		800

Asp Leu Gly Thr His Met Met His Leu Ser Gly Asn Asp Ser Gly Val  
                     805                    810                    815  
 Arg Leu Gly Gln Lys Gln Leu Glu Asn Ala Leu Thr Val His Leu Ser  
                     820                    825                    830  
 Lys Lys Phe Glu Glu Ile Asn Glu Gly Arg Met Pro Gly Thr Val His  
                     835                    840                    845  
 Ser Ser Trp His Ser Val Lys Gln Thr Ile Cys Leu Pro Glu Lys Ser  
                     850                    855                    860  
 His Ser Gln Ile Lys His Arg Asn Leu Ala Ala Leu Val Ser Glu Asp  
 865                    870                    875                    880  
 His Gly Val Asp Thr Ser Gln Glu Met Ser Phe Leu Ser Ser Asn Lys  
                     885                    890                    895  
 Gln Lys Met Leu Glu Ala His Ile Lys Ser Phe His Met Lys Pro Ile  
                     900                    905                    910  
 Leu Asn Leu Ser Ile  
                     915

<210> 3752

<211> 1318

<212> PRT

<213> Homo sapiens

<400> 3752

Met Asp Arg Gln Cys Ser Glu Lys Pro His Ser Cys Thr Pro Thr Gly  
   1                    5                    10                    15  
 Arg Val Ser Ser Ala Val Ser Gln Asn Ser Arg Ile Ser Pro Pro Val  
                     20                    25                    30  
 Ser Thr Ser Met Lys Asp Ser Ser Cys Met Glu Val His Gln Asp Ser  
                     35                    40                    45  
 Ala Arg Arg Asp Arg Trp Ser His Pro Thr Thr Ile Leu Leu His Lys  
                     50                    55                    60  
 Ser Gln Ser Ser Gln Ala Thr Leu Met Pro Gln Glu His Arg Met Phe  
                     65                    70                    75                    80  
 Met Gly Glu Ala Tyr Ser Ala Ala Thr Cys Phe Lys Met Leu Gln Asp  
                     85                    90                    95



Met Asn Ser Ala Asp Pro Phe His Leu Lys Tyr Ile Ile Lys Lys Ile  
 100 105 110  
 Lys Asn Met Ala His Gly Ser Pro Lys Leu Val Met Glu Thr Ile His  
 115 120 125  
 Asp Tyr Phe Ile Asp Asn Pro Glu Ile Ser Ser Arg His Lys Phe Arg  
 130 135 140  
 Leu Phe Gln Thr Leu Glu Met Val Ile Gly Ala Ser Asp Val Leu Glu  
 145 150 155 160  
 Glu Thr Trp Glu Lys Thr Phe Thr Arg Leu Ala Leu Glu Asn Met Thr  
 165 170 175  
 Lys Ala Thr Glu Leu Glu Asp Ile Tyr Gln Asp Ala Ala Ser Asn Met  
 180 185 190  
 Leu Val Ala Ile Cys Arg His Ser Trp Arg Val Val Ala Gln His Leu  
 195 200 205  
 Glu Thr Glu Leu Leu Thr Gly Val Phe Pro His Arg Ser Leu Leu Tyr  
 210 215 220  
 Val Met Gly Val Leu Ser Ser Ser Glu Glu Leu Phe Ser Gln Glu Asp  
 225 230 235 240  
 Lys Ala Cys Trp Glu Glu Gln Leu Ile Gln Met Ala Ile Lys Ser Val  
 245 250 255  
 Pro Phe Leu Ser Thr Asp Val Trp Ser Lys Glu Leu Leu Trp Thr Leu  
 260 265 270  
 Thr Thr Pro Ser Trp Thr Gln Gln Glu Gln Ser Pro Glu Lys Ala Phe  
 275 280 285  
 Met Phe Thr Tyr Tyr Gly Leu Ile Leu Gln Ala Glu Lys Asn Gly Ala  
 290 295 300  
 Thr Val Arg Arg His Leu Gln Ala Leu Leu Glu Thr Ser His Gln Trp  
 305 310 315 320  
 Pro Lys Gln Arg Glu Gly Met Ala Leu Thr Ser Gly Leu Ala Ala Thr  
 325 330 335  
 Arg His Leu Asp Asp Val Trp Ala Val Leu Asp Gln Phe Gly Arg Ser  
 340 345 350  
 Arg Pro Ile Arg Trp Ser Leu Pro Ser Ser Ser Pro Lys Asn Ser Glu  
 355 360 365  
 Asp Leu Arg Trp Lys Trp Ala Ser Ser Thr Ile Leu Leu Ala Tyr Gly

370	375	380
Gln Val Ala Ala Lys Ala Arg Ala His Ile Leu Pro Trp Val Asp Asn		
385	390	395
Ile Val Ser Arg Met Val Phe Tyr Phe His Tyr Ser Ser Trp Asp Glu		400
	405	410
		415
Thr Leu Lys Gln Ser Phe Leu Thr Ala Thr Leu Met Leu Met Gly Ala		
	420	425
		430
Val Ser Arg Ser Glu Gly Ala His Ser Tyr Glu Phe Phe Gln Thr Ser		
	435	440
		445
Glu Leu Leu Gln Cys Leu Met Val Leu Met Glu Lys Glu Pro Gln Asp		
	450	455
		460
Thr Leu Cys Thr Arg Ser Arg Gln Gln Ala Met His Ile Ala Ser Ser		
465	470	475
		480
Leu Cys Lys Leu Arg Pro Pro Ile Asp Leu Glu Arg Lys Ser Gln Leu		
	485	490
		495
Leu Ser Thr Cys Phe Arg Ser Val Phe Ala Leu Pro Leu Leu Asp Ala		
	500	505
		510
Leu Glu Lys His Thr Cys Leu Phe Leu Glu Pro Pro Asn Ile Gln Leu		
	515	520
		525
Trp Pro Val Ala Arg Glu Arg Ala Gly Trp Thr His Gln Gly Trp Gly		
	530	535
		540
Pro Arg Ala Val Leu His Cys Ser Glu His Leu Gln Ser Leu Tyr Ser		
545	550	555
		560
Arg Thr Met Glu Ala Leu Asp Phe Met Leu Gln Ser Leu Ile Met Gln		
	565	570
		575
Asn Pro Thr Ala Asp Glu Leu His Phe Leu Leu Ser His Leu Tyr Ile		
	580	585
		590
Trp Leu Ala Ser Glu Lys Ala His Glu Arg Gln Arg Ala Val His Ser		
	595	600
		605
Cys Met Ile Leu Leu Lys Phe Leu Asn His Asn Gly Tyr Leu Asp Pro		
	610	615
		620
Lys Glu Asp Phe Lys Arg Ile Gly Gln Leu Val Gly Ile Leu Gly Met		
625	630	635
		640
Leu Cys Gln Asp Pro Asp Arg Ala Thr Gln Arg Cys Ser Leu Glu Gly		
	645	650
		655
Ala Ser His Leu Tyr Gln Leu Leu Met Cys His Lys Thr Gly Glu Ala		

660	665	670	
Leu Gln Ala Glu Ser Gln Ala	Pro Lys Glu Leu Ser Gln Ala His Ser		
675	680	685	
Asp Gly Ala Pro Leu Trp Asn Ser Arg Asp Gln Lys Ala Thr Pro Leu			
690	695	700	
Gly Pro Gln Glu Met Ala Lys Asn His Ile Phe Gln Leu Cys Ser Phe			
705	710	715	720
Gln Val Ile Lys Asn Ile Met Gln Gln Leu Thr Leu Ala Glu Leu Ser			
725	730	735	
Asp Leu Ile Trp Thr Ala Ile Asp Gly Leu Gly Ser Thr Ser Pro Phe			
740	745	750	
Arg Val Gln Ala Ala Ser Glu Met Leu Leu Thr Ala Val Gln Glu His			
755	760	765	
Gly Ala Lys Leu Glu Ile Val Ser Ser Met Ala Gln Ala Ile Arg Leu			
770	775	780	
Arg Leu Cys Ser Val His Ile Pro Gln Ala Lys Glu Lys Thr Leu His			
785	790	795	800
Ala Ile Thr Leu Leu Ala Arg Ser His Thr Cys Glu Leu Val Ala Thr			
805	810	815	
Phe Leu Asn Ile Ser Ile Pro Leu Asp Ser His Thr Phe Gln Leu Trp			
820	825	830	
Arg Ala Leu Gly Ala Glu Gln Pro Thr Ser His Leu Val Leu Thr Thr			
835	840	845	
Leu Leu Ala Cys Leu Gln Glu Arg Pro Leu Pro Thr Gly Ala Ser Asp			
850	855	860	
Ser Ser Pro Cys Pro Lys Glu Lys Thr Tyr Leu Arg Leu Leu Ala Ala			
865	870	875	880
Met Asn Met Leu His Glu Leu Gln Phe Ala Arg Glu Phe Lys Gln Ala			
885	890	895	
Val Gln Glu Gly Tyr Pro Lys Leu Phe Leu Ala Leu Leu Thr Gln Met			
900	905	910	
His Tyr Val Leu Glu Leu Asn Leu Pro Ser Glu Pro Gln Pro Lys Gln			
915	920	925	
Gln Ala Gln Glu Ala Ala Val Pro Ser Pro Gln Ser Cys Ser Thr Ser			
930	935	940	
Leu Glu Ala Leu Lys Ser Leu Leu Ser Thr Thr Gly His Trp His Asp			

945                      950                      955                      960  
 Phe Ala His Leu Glu Leu Gln Gly Ser Trp Glu Leu Phe Thr Thr Ile  
                          965                      970                      975  
 His Thr Tyr Pro Lys Gly Val Gly Pro Leu Ala Arg Ala Met Val Gln  
                          980                      985                      990  
 Asn His Cys Arg Gln Ile Pro Ala Val Leu Arg Gln Leu Leu Pro Ser  
                          995                      1000                      1005  
 Leu Gln Ser Pro Gln Glu Arg Glu Arg Lys Val Ala Ile Leu Ile Leu  
                          1010                      1015                      1020  
 Thr Lys Phe Leu Tyr Ser Pro Val Leu Leu Glu Val Leu Pro Lys Gln  
 1025                      1030                      1035                      1040  
 Ala Ala Leu Thr Val Leu Ala Gln Gly Leu His Asp Pro Ser Pro Glu  
                          1045                      1050                      1055  
 Val Arg Val Leu Ser Leu Gln Gly Leu Ser Asn Ile Leu Phe His Pro  
                          1060                      1065                      1070  
 Asp Lys Gly Ser Leu Leu Gln Gly Gln Leu Arg Pro Leu Leu Asp Ser  
                          1075                      1080                      1085  
 Phe Phe Gln Ser Ser Asp Gln Val Ile Val Cys Ile Met Gly Thr Val  
                          1090                      1095                      1100  
 Ser Asp Thr Leu His Arg Leu Gly Ala Gln Gly Thr Gly Ser Gln Ser  
 1105                      1110                      1115                      1120  
 Leu Gly Val Ala Ile Ser Thr Arg Ser Phe Phe Asn Asp Glu Arg Asp  
                          1125                      1130                      1135  
 Gly Ile Arg Ala Ala Ala Met Ala Leu Phe Gly Asp Leu Val Ala Ala  
                          1140                      1145                      1150  
 Met Ala Asp Arg Glu Leu Ser Gly Leu Arg Thr Gln Val His Gln Ser  
                          1155                      1160                      1165  
 Met Val Pro Leu Leu Leu His Leu Lys Asp Gln Cys Pro Ala Val Ala  
                          1170                      1175                      1180  
 Thr Gln Ala Lys Phe Thr Phe Tyr Arg Cys Ala Val Leu Leu Arg Trp  
 1185                      1190                      1195                      1200  
 Arg Leu Leu His Thr Leu Phe Cys Thr Leu Ala Trp Glu Arg Gly Leu  
                          1205                      1210                      1215  
 Ser Ala Arg His Phe Leu Trp Thr Cys Leu Met Thr Arg Ser Gln Glu  
                          1220                      1225                      1230  
 Glu Phe Ser Ile His Leu Ser Gln Ala Leu Ser Tyr Leu His Ser His

1235                      1240                      1245  
 Ser Cys His Ile Lys Thr Trp Val Thr Leu Phe Ile Gly His Thr Ile  
 1250                      1255                      1260  
 Cys Tyr His Pro Gln Ala Val Phe Gln Met Leu Asn Ala Val Asp Thr  
 1265                      1270                      1275                      1280  
 Asn Leu Leu Phe Arg Thr Phe Glu His Leu Arg Ser Asp Pro Glu Pro  
 1285                      1290                      1295  
 Ser Ile Arg Glu Phe Ala Thr Ser Gln Leu Ser Phe Leu Gln Lys Val  
 1300                      1305                      1310  
 Ser Ala Arg Pro Lys Gln  
 1315

<210> 3753

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3753

Met Pro Pro Ala Pro Ala Ser Pro Pro Leu Ser Leu Pro Gly Arg Asp  
 1                      5                      10                      15  
 Gly Arg Arg Leu Cys Leu Pro Leu Pro Asp Leu Pro Cys Pro Gly Glu  
 20                      25                      30  
 Val Asp Thr Lys His Val Leu Gly Asn Leu Leu Pro Thr His Gly Ala  
 35                      40                      45  
 Val Gln Ala Ala Ala Ser Gln Pro Trp Ser Leu Leu Gly Val His Ser  
 50                      55                      60  
 Pro Ile Ala Thr Pro Ala Pro Leu Arg Gly Gln Ile Pro Ile Ser Leu  
 65                      70                      75                      80  
 Ser Cys Leu Gln Asp Glu Tyr Arg Gly Pro Ser Ala Gly Gln Ser Gln  
 85                      90                      95  
 Glu Leu Trp Lys Cys Ser Leu Gln Arg Pro His Leu Asp Ala Pro Arg  
 100                      105                      110  
 Gly Cys Pro Leu Ala Glu Ser Thr Gly Arg Val Glu Ala Ala Ser Ala  
 115                      120                      125  
 Met Ser Ala Ala His Val Pro Gly Ala His Pro Arg Arg Arg Leu Cys

130	135	140	
Leu Leu Ala Ala Pro Thr Asp Phe Leu Ser Phe Leu Trp Ser Ala Leu			
145	150	155	160
Pro Pro Ser Leu Pro Pro Pro Tyr Pro Gln Arg His Leu Leu Thr Pro			
	165	170	175
Ser Ser Met Leu Cys Pro Gly Trp Asp Ala Ser Trp Ala Val Pro Gly			
	180	185	190
Pro Arg Leu Glu Pro Leu Pro Leu Phe Leu Trp Val Ser Pro Cys Pro			
	195	200	205
Ala Ala Gly Asn Leu Arg Val Leu Ser Lys Lys Ser Cys Lys Leu Ala			
	210	215	220
Arg Pro Gly Arg Ala Glu Ala Ser Phe Leu Pro Asp Gly Trp Phe Ala			
225	230	235	240

&lt;210&gt; 3754

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3754

Met Trp Ser Leu Pro Gly Gly Leu Leu Ser Gly Leu Ala Thr His Pro			
1	5	10	15
Trp Gln His Cys Pro Ile Ser Gly Leu Asp Phe Leu Arg Ser Cys Arg			
	20	25	30
Gly His Ser Leu Gln Pro Arg Arg Gly Ser Pro Leu Val Gln Pro Lys			
	35	40	45
Leu Ser Met Gly Leu Glu His Pro Cys Gln Pro Cys Ala Pro Ser Thr			
	50	55	60
Pro Arg Ser Arg Phe Ser Ser Val Ser Gln Gln Arg Gly Ser Val Leu			
	65	70	75
Pro Ser Leu Cys Val Ser Trp Ala Lys Thr Trp Gly Ala Leu Gly Gln			
	85	90	95
Gly Trp Cys Phe Pro Gln Ala His Leu Gly Arg Gly Leu Ala Pro Ser			
	100	105	110
Leu Ala Gln Val Leu Ser Ser Ala Leu Val Ala Leu Glu			

115

120

125

&lt;210&gt; 3755

&lt;211&gt; 890

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3755

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Met Met Met Val Met Gln Pro Glu Gly Leu Gly Ala Gly Glu Gly Arg
 1             5             10             15
Phe Ala Gly Gly Gly Gly Gly Glu Tyr Met Glu Gln Glu Glu Asp
      20             25             30
Trp Asp Arg Asp Leu Leu Leu Asp Pro Ala Trp Cys Asn Ser His Leu
      35             40             45
Arg Lys Ala Gly Thr Gln Ile Glu Asn Ile Glu Glu Asp Phe Arg Asn
      50             55             60
Gly Leu Lys Leu Met Leu Leu Leu Glu Val Ile Ser Gly Glu Arg Leu
      65             70             75             80
Pro Arg Pro Asp Lys Gly Lys Met Arg Phe His Lys Ile Ala Asn Val
      85             90             95
Asn Lys Ala Leu Asp Phe Ile Ala Ser Lys Gly Val Lys Leu Val Ser
      100            105            110
Ile Gly Ala Glu Glu Ile Val Asp Gly Asn Leu Lys Met Thr Leu Gly
      115            120            125
Met Ile Trp Thr Ile Ile Leu Arg Phe Ala Ile Gln Asp Ile Ser Val
      130            135            140
Glu Glu Thr Ser Ala Lys Glu Gly Leu Leu Leu Trp Cys Gln Arg Lys
      145            150            155            160
Thr Ala Pro Tyr Arg Asn Val Asn Val Gln Asn Phe His Thr Ser Trp
      165            170            175
Lys Asp Gly Leu Ala Leu Cys Ala Leu Ile His Arg His Arg Pro Asp
      180            185            190
Leu Ile Asp Tyr Ala Lys Leu Arg Lys Asp Asp Pro Ile Gly Asn Leu
      195            200            205
Asn Thr Ala Phe Glu Val Ala Glu Lys Tyr Leu Asp Ile Pro Lys Met

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210	215	220
Leu Asp Ala Glu Asp Ile Val Asn Thr Pro Lys Pro Asp Glu Lys Ala		
225	230	235
Ile Met Thr Tyr Val Ser Cys Phe Tyr His Ala Phe Ala Gly Ala Glu		
245	250	255
Gln Ala Glu Thr Ala Ala Asn Arg Ile Cys Lys Val Leu Ala Val Asn		
260	265	270
Gln Glu Asn Glu Lys Leu Met Glu Glu Tyr Glu Lys Leu Ala Ser Glu		
275	280	285
Leu Leu Glu Trp Ile Arg Arg Thr Val Pro Trp Leu Glu Asn Arg Val		
290	295	300
Gly Glu Pro Ser Met Ser Ala Met Gln Arg Lys Leu Glu Asp Phe Arg		
305	310	315
Asp Tyr Arg Arg Leu His Lys Pro Pro Arg Ile Gln Glu Lys Cys Gln		
325	330	335
Leu Glu Ile Asn Phe Asn Thr Leu Gln Thr Lys Leu Arg Leu Ser His		
340	345	350
Arg Pro Ala Phe Met Pro Ser Glu Gly Lys Leu Val Ser Asp Ile Ala		
355	360	365
Asn Ala Trp Arg Gly Leu Glu Gln Val Glu Lys Gly Tyr Glu Asp Trp		
370	375	380
Leu Leu Ser Glu Ile Arg Arg Leu Gln Arg Leu Gln His Leu Ala Glu		
385	390	395
Lys Phe Arg Gln Lys Ala Ser Leu His Glu Ala Trp Thr Arg Gly Lys		
405	410	415
Glu Glu Met Leu Ser Gln Arg Asp Tyr Asp Ser Ala Leu Leu Gln Glu		
420	425	430
Val Arg Ala Leu Leu Arg Arg His Glu Ala Phe Glu Ser Asp Leu Ala		
435	440	445
Ala His Gln Asp Arg Val Glu His Ile Ala Ala Leu Ala Gln Glu Leu		
450	455	460
Asn Glu Leu Asp Tyr His Glu Ala Ala Ser Val Asn Ser Arg Cys Gln		
465	470	475
Ala Ile Cys Asp Gln Trp Asp Asn Leu Gly Thr Leu Thr Gln Lys Arg		
485	490	495
Arg Asp Ala Leu Glu Arg Met Glu Lys Leu Leu Glu Thr Ile Asp Gln		



500	505	510
Leu Gln Leu Glu Phe Ala Arg Arg Ala Ala Pro Phe Asn Asn Trp Leu		
515	520	525
Asp Gly Ala Val Glu Asp Leu Gln Asp Val Trp Leu Val His Ser Val		
530	535	540
Glu Glu Thr Gln Ser Leu Leu Thr Ala His Asp Gln Phe Lys Ala Thr		
545	550	555
Leu Pro Glu Ala Asp Arg Glu Arg Gly Ala Ile Met Gly Ile Gln Gly		
565	570	575
Glu Ile Gln Lys Ile Cys Gln Thr Tyr Gly Leu Arg Pro Cys Ser Thr		
580	585	590
Asn Pro Tyr Ile Thr Leu Ser Pro Gln Asp Ile Asn Thr Lys Trp Asp		
595	600	605
Met Val Arg Lys Leu Val Pro Ser Arg Asp Gln Thr Leu Gln Glu Glu		
610	615	620
Leu Ala Arg Gln Gln Val Asn Glu Arg Leu Arg Arg Gln Phe Ala Ala		
625	630	635
Gln Ala Asn Ala Ile Gly Pro Trp Ile Gln Ala Lys Val Glu Glu Val		
645	650	655
Gly Arg Leu Ala Ala Gly Leu Ala Gly Ser Leu Glu Glu Gln Met Ala		
660	665	670
Gly Leu Arg Gln Gln Glu Gln Asn Ile Ile Asn Tyr Lys Thr Asn Ile		
675	680	685
Asp Arg Leu Glu Gly Asp His Gln Leu Leu Gln Glu Ser Leu Val Phe		
690	695	700
Asp Ser Lys His Thr Val Tyr Ser Met Glu His Ile Arg Val Gly Trp		
705	710	715
Glu Gln Leu Leu Thr Ser Ile Ala Arg Thr Ile Asn Glu Val Glu Asn		
725	730	735
Gln Val Leu Thr Arg Asp Ala Lys Gly Leu Ser Gln Glu Gln Leu Asn		
740	745	750
Glu Phe Arg Ala Ser Phe Asn His Phe Asp Arg Lys Arg Asn Gly Met		
755	760	765
Met Glu Pro Asp Asp Phe Arg Ala Cys Leu Ile Ser Met Gly Tyr Asp		
770	775	780
Leu Gly Glu Val Glu Phe Ala Arg Ile Met Thr Met Val Asp Pro Asn		

785                      790                      795                      800  
 Ala Ala Gly Val Val Thr Phe Gln Ala Phe Ile Asp Phe Met Thr Arg  
                          805                      810                      815  
 Glu Thr Ala Glu Thr Asp Thr Thr Glu Gln Val Val Ala Ser Phe Lys  
                          820                      825                      830  
 Ile Leu Ala Gly Asp Lys Asn Tyr Ile Thr Pro Glu Glu Leu Arg Arg  
                          835                      840                      845  
 Glu Leu Pro Ala Lys Gln Ala Glu Tyr Cys Ile Arg Arg Met Val Pro  
                          850                      855                      860  
 Tyr Lys Gly Ser Gly Ala Pro Ala Gly Ala Leu Asp Tyr Val Ala Phe  
 865                      870                      875                      880  
 Ser Ser Ala Leu Tyr Gly Glu Ser Asp Leu  
                          885                      890

<210> 3756

<211> 279

<212> PRT

<213> Homo sapiens

<400> 3756

Met Arg Cys Pro Pro Gly Ala Ser Leu Ala Ala Ala Arg Gln Asp Leu  
   1                      5                      10                      15  
 Pro Ala Trp Asp Tyr Ser Met Arg Gly Arg Ser Gly Trp Ser Trp Cys  
                          20                      25                      30  
 Gly Ser Leu Ser Gln Pro Phe Leu Cys Ile Gly Ala Leu Pro Arg Arg  
                          35                      40                      45  
 His Leu Ser Cys Lys Arg Gly Glu Cys Asp Val Asp Thr Trp Ala Pro  
                          50                      55                      60  
 Gly Leu Ala Cys Val Ile Trp Ala Gly Pro His Lys His His Lys His  
                          65                      70                      75                      80  
 Leu Phe His His Ala Ile Asp Gly Cys Trp Ala Ala Gln Gly Cys Asp  
                          85                      90                      95  
 Val Glu Leu Gly Asn Pro Ala Trp Glu Gly Ser Ile Pro Gly Ala Ala  
                          100                      105                      110  
 Phe Gln Lys Lys Asn Ser Leu His Gln Glu Gly Val Ala Glu Pro Gln

115	120	125
Ser Pro Arg Asn Leu Arg Glu Ala Pro Lys Gly Gly Leu Pro Glu Asp		
130	135	140
Thr His Pro Pro Tyr Leu Leu His Thr Gly Ser Ser Asn Gln Thr Val		
145	150	155
Trp Pro Lys Gln Pro Gly Tyr Phe His Leu Ser Gln Gln Pro Trp Ala		
165	170	175
Thr Leu Gly Met Val Pro Asn Met Ala Cys Ala Ala Val Thr Val Leu		
180	185	190
Arg Gly Leu Ala Ser Thr Gly Ser Phe Leu Leu Asp Gly Gly Thr Gly		
195	200	205
Ala Arg Ile Tyr Leu Leu Pro Tyr Ser Val Pro Ala Gln Pro Arg Ser		
210	215	220
Met Asp Pro Phe Thr Gly Cys Phe Ile Pro His Pro Pro Glu Leu Leu		
225	230	235
Gly Pro Leu Arg Cys Pro Gly Asp Gly Gly Ala Leu Cys Leu Cys Pro		
245	250	255
Val Ala Ala Ile Ala Ala Thr Thr Ser Thr Ser Ser Ala Gly Trp Pro		
260	265	270
Pro Gly Thr Ala Ser Pro Gly		
275		

&lt;210&gt; 3757

&lt;211&gt; 255

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3757

Met Met Ser Ile Phe Leu Met Gly Cys Tyr Asp Pro Gly Ser Gln Lys
1 5 10 15
Trp Cys Thr Val Thr Lys Cys Ala Gly Gly His Asp Asp Ala Thr Leu
20 25 30
Ala Arg Leu Gln Asn Glu Leu Asp Met Val Lys Ile Ser Lys Asp Pro
35 40 45
Ser Lys Ile Pro Ser Trp Leu Lys Val Asn Lys Ile Tyr Tyr Pro Asp

50	55	60
Phe Ile Val Pro Asp Pro Lys Lys Ala Ala Val Trp Glu Ile Thr Gly		
65	70	75
Ala Glu Phe Ser Lys Ser Glu Ala His Thr Ala Asp Gly Ile Ser Ile		
85	90	95
Arg Phe Pro Arg Cys Thr Arg Ile Arg Asp Asp Lys Asp Trp Lys Ser		
100	105	110
Ala Thr Asn Leu Pro Gln Leu Lys Glu Leu Tyr Gln Leu Ser Lys Glu		
115	120	125
Lys Ala Asp Phe Thr Val Val Ala Gly Asp Glu Gly Ser Ser Thr Thr		
130	135	140
Gly Gly Ser Ser Glu Glu Asn Lys Gly Pro Ser Gly Ser Ala Val Ser		
145	150	155
Arg Lys Ala Pro Ser Lys Pro Ser Ala Ser Thr Lys Lys Ala Glu Gly		
165	170	175
Lys Leu Ser Asn Ser Asn Ser Lys Asp Gly Asn Met Gln Thr Ala Lys		
180	185	190
Pro Ser Ala Met Lys Val Gly Glu Lys Leu Ala Thr Lys Ser Ser Pro		
195	200	205
Val Lys Val Gly Glu Lys Arg Lys Ala Ala Asp Glu Thr Leu Cys Gln		
210	215	220
Thr Lys Val Arg Val Lys Thr Ala Thr His His Val Gly Gln Phe Ser		
225	230	235
Pro Gly Cys Val Pro Asn Leu Leu Tyr Lys Lys Phe Glu Arg Gly		
245	250	255

&lt;210&gt; 3758

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3758

Met Asn Val Pro Arg Ser Gln Pro Ala Ser Lys Glu Leu Leu Lys Gly
1 5 10 15
Glu Leu Ser Met Tyr Asn Asn Glu Arg Arg Phe Arg Ile Arg Ser Gln

20	25	30
Asp Ser Tyr Asn Pro Phe Ile Leu	Leu Phe Phe Ser Arg Arg Ser Leu	
35	40	45
Ser Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Leu Ala His Cys		
50	55	60
Asn Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg		
65	70	75
Val Ala Gly Ile Thr Val Ala Arg His His Ala Trp Leu Ile Phe Val		
85	90	95
Phe Leu Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu Glu		
100	105	110
Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Gly		
115	120	125
Ile Thr Gly Val Ser His His Thr Arg Phe Ile Leu Leu Phe Thr His		
130	135	140
Ser Ser Phe Asn Lys His Thr Val Glu Ile His Ile Ser Val Ser Ala		
145	150	155
Phe Asn His Arg Lys Ser Glu Leu Ser Thr Gln Leu Leu Met Cys Trp		
165	170	175
Ile His Glu Lys Cys Ser Val Cys Phe Asn Leu Leu Ala Leu Lys Tyr		
180	185	190
Cys Met Gln Ser Val Gly Phe Asn Ser Leu		
195	200	

&lt;210&gt; 3759

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3759

Met Ser Ala Ala Phe Pro Gly Ala Ser Leu Tyr Leu Pro Met Ala Gln
1 5 10 15
Ser Val Ala Val Gly Pro Leu Gly Ser Thr Ile Pro Met Ala Tyr Tyr
20 25 30
Pro Val Gly Pro Ile Tyr Pro Pro Gly Ser Thr Val Leu Val Glu Gly

35 40 45  
 Gly Tyr Asp Ala Gly Ala Arg Phe Gly Ala Gly Ala Thr Ala Gly Asn  
 50 55 60  
 Ile Pro Pro Pro Pro Pro Gly Cys Pro Pro Asn Ala Ala Gln Leu Ala  
 65 70 75 80  
 Val Met Gln Gly Ala Asn Val Leu Val Thr Gln Arg Lys Gly Asn Phe  
 85 90 95  
 Phe Met Gly Gly Ser Asp Gly Gly Tyr Thr Ile Trp  
 100 105

<210> 3760

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3760

Met Gly His Lys Arg Glu Phe Arg Ala Pro Thr Leu Ala Ser Leu Glu  
 1 5 10 15  
 Asn Cys Met Lys Leu Ser Gln Met Ala Val Gln Gly Leu Gln Gln Phe  
 20 25 30  
 Lys Ser Pro Leu Leu Gln Leu Pro His Ile Glu Glu Asp Asn Leu Arg  
 35 40 45  
 Arg Val Ser Asn His Lys Lys Tyr Lys Ile Lys Thr Ile Gln Asp Leu  
 50 55 60  
 Val Ser Leu Lys Glu Ser Asp Arg His Thr Leu Leu His Phe Leu Glu  
 65 70 75 80  
 Asp Glu Lys Tyr Glu Glu Val Met Ala Val Leu Gly Ser Phe Pro Tyr  
 85 90 95  
 Val Thr Met Asp Ile Lys Ser Gln Val Leu Asp Asp Glu Asp Ser Asn  
 100 105 110  
 Asn Ile Thr Val Gly Ser Leu Val Thr Val Leu Val Lys Leu Thr Arg  
 115 120 125  
 Gln Thr Met Ala Glu Val Phe Glu Lys Glu Gln Ser Ile Cys Ala Ala  
 130 135 140  
 Glu Glu Gln Pro Ala Glu Asp Gly Gln Gly Glu Thr Asn Lys Asn Arg

145                      150                      155                      160  
 Thr Lys Gly Gly Trp Gln Gln Lys Ser Lys Gly Pro Lys Lys Thr Ala  
                             165                      170                      175  
 Lys Ser Lys Lys Lys Lys Pro Leu Lys Lys Lys Pro Thr Pro Val Leu  
                             180                      185                      190  
 Leu Pro Gln Ser Lys Gln Gln Lys Gln Lys Gln Ala Asn Gly Val Val  
                             195                      200                      205  
 Gly Asn Glu Ala Ala Val Lys Glu Asp Glu Glu Glu Val Ser Asp Lys  
                             210                      215                      220  
 Gly Ser Asp Ser Glu Glu Glu Glu Leu Gln Gln Ser Ile Gln Arg Lys  
 225                      230                      235                      240  
 Glu Arg Ala Leu Leu Glu Thr Lys Ser Lys Ile Thr His Pro Val Tyr  
                             245                      250                      255  
 Ser Leu Tyr Phe Pro Glu Glu Lys Gln Glu Trp Trp Trp Leu Tyr Ile  
                             260                      265                      270  
 Ala Asp Arg Lys Glu Gln Thr Leu Ile Ser Met Pro Tyr His Val Cys  
                             275                      280                      285  
 Thr Leu Lys Asp Thr Glu Glu Val Glu Leu Lys Phe Pro Ala Pro Gly  
                             290                      295                      300  
 Lys Pro Gly Asn Tyr Gln Tyr Thr Val Phe Leu Arg Ser Asp Ser Tyr  
 305                      310                      315                      320  
 Met Gly Leu Asp Gln Ile Lys Pro Leu Lys Leu Glu Val His Glu Ala  
                             325                      330                      335  
 Lys Pro Val Pro Glu Asn His Pro Gln Trp Asp Thr Ala Ile Glu Gly  
                             340                      345                      350  
 Asp Glu Asp Gln Glu Asp Ser Glu Gly Phe Glu Asp Ser Phe Glu Glu  
                             355                      360                      365  
 Glu Glu Glu Glu Glu Glu Asp Asp Asp  
                             370                      375

<210> 3761

<211> 156

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3761

Met Val His Gly Thr Ala Ala Val Ala Leu Tyr Leu Asp Pro Leu Phe  
 1 5 10 15  
 Phe Leu Arg Arg Ser Phe Ala Leu Leu Pro Arg Leu Glu Cys Ser Gly  
 20 25 30  
 Ala Ile Leu Ala His Cys Lys Leu Arg Leu Gln Gly Ser Cys His Ser  
 35 40 45  
 Pro Ala Ser Gly Leu His Leu Ser Gly Ser Ser Asp Ser Pro Ala Ser  
 50 55 60  
 Ala Ser Ala Ser Trp Val Gln Ala Asn Leu Arg Leu Leu Asp Pro Ser  
 65 70 75 80  
 Asp Ser Pro Ala Ser Ala Ser Gln Leu Ala Gly Thr Thr Gly Val Arg  
 85 90 95  
 Asn His Ala Gln Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His  
 100 105 110  
 His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Leu Arg  
 115 120 125  
 Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Arg His Arg Ala  
 130 135 140  
 Arg Pro Ser Val Ser Phe Lys Gln Gly Ser Gly Glu  
 145 150 155

&lt;210&gt; 3762

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3762

Met Ser Ser Thr Trp Gln Val Gly Cys Leu Phe Pro Asp Ile Ser Ser  
 1 5 10 15  
 Leu Phe Gln Ser Arg Arg Gly Arg Thr Lys Gly Ile Pro Thr Leu Gly  
 20 25 30  
 Gln Leu His Phe Thr Ala Phe Leu Lys Thr Leu Pro Arg Glu Leu Cys  
 35 40 45  
 Phe Ile Ser Leu Ala Gly Thr Val Ser His Gly Gln Pro Trp Leu Gln



50                      55                      60  
 Arg Arg Leu Gly Val Leu Leu Leu Phe Phe Lys Met Val Ser Cys Ser  
 65                      70                      75                      80  
 Val Val Gln Phe Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Pro  
                     85                      90                      95  
 Pro Pro Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Ser Ser Ser  
                     100                      105                      110  
 Trp Asp Tyr Arg Pro Thr Pro Pro His Pro Ala Asn Phe Cys Ile Phe  
                     115                      120                      125  
 Ser Arg Asp Gly Val Leu Pro Cys Trp Pro Ser Trp Ser Gln Thr Ala  
                     130                      135                      140  
 Asp Leu Arg  
 145

<210> 3763

<211> 367

<212> PRT

<213> Homo sapiens

<400> 3763

Met Cys Gly Asp Gly Thr Asn Asp Val Gly Ala Leu Lys His Ala Asp  
 1                      5                      10                      15  
 Val Gly Val Ala Leu Leu Ala Asn Ala Pro Glu Arg Val Val Glu Arg  
                     20                      25                      30  
 Arg Arg Arg Pro Arg Asp Ser Pro Thr Leu Ser Asn Ser Gly Ile Arg  
                     35                      40                      45  
 Ala Thr Ser Arg Thr Ala Lys Gln Arg Ser Gly Leu Pro Pro Ser Glu  
                     50                      55                      60  
 Glu Gln Pro Thr Ser Gln Arg Asp Arg Leu Ser Gln Val Leu Arg Asp  
 65                      70                      75                      80  
 Leu Glu Asp Glu Ser Thr Pro Ile Val Lys Leu Gly Asp Ala Ser Ile  
                     85                      90                      95  
 Ala Ala Pro Phe Thr Ser Lys Leu Ser Ser Ile Gln Cys Ile Cys His  
                     100                      105                      110  
 Val Ile Lys Gln Gly Arg Cys Thr Leu Val Thr Thr Leu Gln Met Phe

115	120	125
Lys Ile Leu Ala Leu Asn Ala Leu Ile Leu Ala Tyr Ser Gln Ser Val		
130	135	140
Leu Tyr Leu Glu Gly Val Lys Phe Ser Asp Phe Gln Ala Thr Leu Gln		
145	150	155
Gly Leu Leu Leu Ala Gly Cys Phe Leu Phe Ile Ser Arg Ser Lys Pro		
165	170	175
Leu Lys Thr Leu Ser Arg Glu Arg Pro Leu Pro Asn Ile Phe Asn Leu		
180	185	190
Tyr Thr Ile Leu Thr Val Met Leu Gln Phe Phe Val His Phe Leu Ser		
195	200	205
Leu Val Tyr Leu Tyr Arg Glu Ala Gln Ala Arg Ser Pro Glu Lys Gln		
210	215	220
Glu Gln Phe Val Asp Leu Tyr Lys Glu Phe Glu Pro Ser Leu Val Asn		
225	230	235
Ser Thr Val Tyr Ile Met Ala Met Ala Met Gln Met Ala Thr Phe Ala		
245	250	255
Ile Asn Tyr Lys Val Arg Pro Gly Pro Cys Pro Asn Ile His Cys Leu		
260	265	270
Pro Thr Gln Pro His Pro Met Lys Pro Ser Val Pro His Pro His Arg		
275	280	285
Ala Arg Pro Ser Trp Arg Ala Cys Pro Arg Thr Ser Pro Trp Cys Gly		
290	295	300
Val Trp Gln Phe His Ser Trp Pro Ser Leu Ala Cys Ser Ser Ala Pro		
305	310	315
Arg Pro Thr Ser Thr Ala Ser Leu Ala Ser Trp Thr Ser Leu Trp Ser		
325	330	335
Ser Ser Trp Ser Leu Pro Arg Ser Cys Ser Trp Thr Ser Ala Trp Arg		
340	345	350
Ser Trp Pro Thr Ala Ser Cys Ser Ser Ser Trp Gly Pro Arg Ser		
355	360	365

&lt;210&gt; 3764

&lt;211&gt; 109

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3764

Met Asn Arg Val Cys Pro Thr Cys Trp Arg Cys Ala Leu Pro Pro Ala  
 1 5 10 15  
 Ala Pro Gly Arg His Ser His Pro Phe Ser Asp Glu Glu Val Asp Val  
 20 25 30  
 Trp Arg Gln Arg Val His Ala Glu Ser Leu Leu Gln Thr Arg Leu Lys  
 35 40 45  
 Gly Gly Pro Gln Pro Leu Ser Gln Asn Val Ser Ser Val Ala Gly Ser  
 50 55 60  
 Ala Pro Glu Glu Gln Lys Gln Trp Pro Gly Val Cys Phe Gln Leu Cys  
 65 70 75 80  
 Ser Phe Leu Glu Ala Ser Gly Gly Cys Asp Gln Lys Ala Ala Leu Thr  
 85 90 95  
 Gly Gly Ser Thr Gln His Leu Gln Arg Pro Lys Ser Ser  
 100 105

&lt;210&gt; 3765

&lt;211&gt; 274

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3765

Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr Ser Gly  
 1 5 10 15  
 Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala Asp Leu  
 20 25 30  
 Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu Val Ala  
 35 40 45  
 Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met Asp Pro  
 50 55 60  
 Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys Trp Ser  
 65 70 75 80  
 Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln Leu Leu

	85		90		95										
Ala	Leu	Thr	Leu	Trp	Lys	Glu	Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His
	100		105		110										
Phe	Leu	His	Ser	Ala	Asp	Gly	Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu
	115		120		125										
Tyr	Ser	Thr	Ser	Arg	Gly	Phe	Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala
	130		135		140										
Gln	Ala	Val	Leu	Gln	Phe	Leu	Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser
145			150		155										160
Val	Val	Phe	Thr	Thr	Tyr	Thr	Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly
	165		170		175										
Pro	Pro	Phe	Val	Glu	Pro	Leu	Leu	Asn	Phe	Ile	Trp	Phe	Leu	Leu	Leu
	180		185		190										
Ala	Val	Asp	Gly	Gly	Lys	Leu	Thr	Val	Phe	Thr	Val	Leu	Cys	Glu	Gln
	195		200		205										
Tyr	Gln	Pro	Ser	Leu	Arg	Arg	Asp	Pro	Met	Tyr	Asn	Glu	Tyr	Leu	Asp
	210		215		220										
Arg	Ile	Gly	Gln	Leu	Phe	Phe	Gly	Val	Pro	Pro	Lys	Gln	Thr	Ser	Ser
225			230		235										240
Tyr	Gly	Gly	Leu	Leu	Gly	Asn	Leu	Leu	Thr	Ser	Leu	Met	Gly	Ser	Ser
	245		250		255										
Glu	Gln	Glu	Asp	Gly	Glu	Glu	Ser	Pro	Ser	Asp	Gly	Ser	Pro	Ile	Glu
	260		265		270										

Leu Asp

&lt;210&gt; 3766

&lt;211&gt; 798

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3766

Met	Ile	Val	Ala	Leu	Arg	Glu	Ala	Leu	Thr	Ser	Thr	Asn	Pro	Lys	Ala
1		5		10		15									
Ala	Leu	Lys	Ser	Lys	Ile	Val	Ala	Glu	Phe	Arg	Ser	Gln	Ala	Leu	Ile

20	25	30	
Glu Glu Leu Leu Leu Tyr Lys Arg Ser Glu Asp Gln Ile Glu Leu Lys			
35	40	45	
Glu Lys Gln Leu Ser Thr Met Arg Val Asp Val Cys Ser Thr Glu Thr			
50	55	60	
Leu Lys Cys Leu Lys Asp Lys Thr Gly Gly Lys Lys Phe Ser Lys Glu			
65	70	75	80
Phe Glu Glu Ala Ser Ser Lys Leu Glu Glu Phe Val Asn Gly Leu Asp			
85	90	95	
Lys Gln Val Lys Asn Gly Pro Ser Leu Thr Glu Ala Leu Glu Asn Ala			
100	105	110	
Gly Ile Phe Tyr Glu Ala Gln Tyr Lys Glu Val Lys Val Val Ala Asn			
115	120	125	
Ala Tyr Lys Thr Phe Ala Asn Arg Val Asn Asn Leu Lys Lys Lys Leu			
130	135	140	
Asp Gln Leu Lys Ser Thr Leu Pro Asp Pro Glu Glu Ser Pro Val Pro			
145	150	155	160
Ser Pro Ser Met Asp Ala Pro Ser Pro Thr Gly Ser Glu Ser Pro Phe			
165	170	175	
Gln Gly Met Gly Gly Glu Glu Ser Gln Ser Pro Thr Val Glu Ser Glu			
180	185	190	
Lys Ser Ala Thr Pro Glu Pro Val Thr Asp Asn Arg Asp Val Glu Asp			
195	200	205	
Met Glu Leu Ser Asp Val Glu Asp Asp Gly Ser Lys Ile Ile Val Glu			
210	215	220	
Asp Arg Lys Glu Lys Pro Ala Glu Lys Ser Ala Val Ser Thr Ser Val			
225	230	235	240
Pro Thr Lys Pro Thr Glu Asn Ile Ser Lys Ala Ser Ser Cys Thr Pro			
245	250	255	
Val Pro Val Thr Met Thr Ala Thr Pro Pro Leu Pro Lys Pro Val Asn			
260	265	270	
Thr Ser Leu Ser Pro Ser Pro Ala Leu Ala Leu Pro Asn Leu Ala Asn			
275	280	285	
Val Asp Leu Ala Lys Ile Ser Ser Ile Leu Ser Ser Leu Thr Ser Val			
290	295	300	
Met Lys Asn Thr Gly Val Ser Pro Ala Ser Arg Pro Ser Pro Gly Thr			

305                      310                      315                      320  
 Pro Thr Ser Pro Ser Asn Leu Thr Ser Gly Leu Lys Thr Pro Ala Pro  
                                  325                      330                      335  
 Ala Thr Thr Thr Ser His Asn Pro Leu Ala Asn Ile Leu Ser Lys Val  
                                  340                      345                      350  
 Glu Ile Thr Pro Glu Ser Ile Leu Ser Ala Leu Ser Lys Thr Gln Thr  
                                  355                      360                      365  
 Gln Ser Ala Pro Ala Leu Gln Gly Leu Ser Ser Leu Leu Gln Ser Val  
                                  370                      375                      380  
 Thr Gly Asn Pro Val Pro Ala Ser Glu Ala Ala Ser Gln Ser Thr Ser  
 385                      390                      395                      400  
 Ala Ser Pro Ala Asn Thr Thr Val Ser Thr Ile Lys Gly Arg Asn Leu  
                                  405                      410                      415  
 Pro Ser Ser Ala Gln Pro Phe Ile Pro Lys Ser Phe Asn Tyr Ser Pro  
                                  420                      425                      430  
 Asn Ser Ser Thr Ser Glu Val Ser Ser Thr Ser Ala Ser Lys Ala Ser  
                                  435                      440                      445  
 Ile Gly Gln Ser Pro Gly Leu Pro Ser Thr Thr Phe Lys Leu Pro Ser  
                                  450                      455                      460  
 Asn Ser Leu Gly Phe Thr Ala Thr His Asn Thr Ser Pro Ala Ala Pro  
 465                      470                      475                      480  
 Pro Thr Glu Val Thr Ile Cys Gln Ser Ser Glu Val Ser Lys Pro Lys  
                                  485                      490                      495  
 Leu Glu Ser Glu Ser Thr Ser Pro Ser Leu Glu Met Lys Ile His Asn  
                                  500                      505                      510  
 Phe Leu Lys Gly Asn Pro Gly Phe Ser Gly Leu Asn Leu Asn Ile Pro  
                                  515                      520                      525  
 Ile Leu Ser Ser Leu Gly Ser Ser Ala Pro Ser Glu Ser His Pro Ser  
                                  530                      535                      540  
 Asp Phe Gln Arg Gly Pro Thr Ser Thr Ser Ile Asp Asn Ile Asp Gly  
 545                      550                      555                      560  
 Thr Pro Val Arg Asp Glu Arg Ser Gly Thr Pro Thr Gln Asp Glu Met  
                                  565                      570                      575  
 Met Asp Lys Pro Thr Ser Ser Ser Val Asp Thr Met Ser Leu Leu Ser  
                                  580                      585                      590  
 Lys Ile Ile Ser Pro Gly Ser Ser Thr Pro Ser Ser Thr Arg Ser Pro

595	600	605
Pro Pro Gly Arg Asp Glu Ser Tyr Pro Arg Glu Leu Ser Asn Ser Val		
610	615	620
Ser Thr Tyr Arg Pro Phe Gly Leu Gly Ser Glu Ser Pro Tyr Lys Gln		
625	630	635
Pro Ser Asp Gly Met Glu Arg Pro Ser Ser Leu Met Asp Ser Ser Gln		
645	650	655
Glu Lys Phe Tyr Pro Asp Thr Ser Phe Gln Glu Asp Glu Asp Tyr Arg		
660	665	670
Asp Phe Glu Tyr Ser Gly Pro Pro Pro Ser Ala Met Met Asn Leu Glu		
675	680	685
Lys Lys Pro Ala Lys Ser Ile Leu Lys Ser Ser Lys Leu Ser Asp Thr		
690	695	700
Thr Glu Tyr Gln Pro Ile Leu Ser Ser Tyr Ser His Arg Ala Gln Glu		
705	710	715
Phe Gly Val Lys Pro Ala Phe Pro Pro Ser Val Arg Ala Leu Leu Asp		
725	730	735
Ser Ser Glu Asn Cys Asp Arg Leu Ser Ser Ser Pro Gly Leu Phe Gly		
740	745	750
Ala Phe Ser Val Arg Gly Asn Glu Pro Gly Ser Asp Arg Ser Pro Ser		
755	760	765
Pro Lys His Pro Cys Arg Ser His Gly Ser Pro Thr His Val Arg Arg		
770	775	780
Gly Glu Ser Pro Gly Leu His His Phe His His Val Asp Asp		
785	790	795

&lt;210&gt; 3767

&lt;211&gt; 314

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

Met Ala Ala Thr Asn Leu Glu Asn Gln Leu His Ser Ala Gln Lys Asn

1

5

10

15

Leu Leu Phe Leu Gln Arg Glu His Ala Ser Thr Leu Lys Gly Leu His  
                   20                                  25                                  30  
 Ser Glu Ile Arg Arg Leu Gln Gln His Cys Thr Asp Leu Thr Tyr Glu  
                   35                                  40                                  45  
 Leu Thr Val Lys Ser Ser Glu Gln Thr Gly Asp Gly Thr Ser Lys Ser  
                   50                                  55                                  60  
 Ser Glu Leu Lys Lys Arg Cys Glu Glu Leu Glu Ala Gln Leu Lys Val  
                   65                                  70                                  75                                  80  
 Lys Glu Asn Glu Asn Ala Glu Leu Leu Lys Glu Leu Glu Gln Lys Asn  
                                   85                                  90                                  95  
 Ala Met Ile Thr Val Leu Glu Asn Thr Ile Lys Glu Arg Glu Lys Lys  
                   100                                  105                                  110  
 Tyr Leu Glu Glu Leu Lys Ala Lys Ser His Lys Leu Thr Leu Leu Ser  
                   115                                  120                                  125  
 Ser Glu Leu Glu Gln Arg Ala Ser Thr Ile Ala Tyr Leu Thr Ser Gln  
                   130                                  135                                  140  
 Leu His Ala Ala Lys Lys Lys Leu Met Ser Ser Ser Gly Thr Ser Asp  
                   145                                  150                                  155                                  160  
 Ala Ser Pro Ser Gly Ser Pro Val Leu Ala Ser Tyr Lys Pro Ala Pro  
                   165                                  170                                  175  
 Pro Lys Asp Lys Leu Pro Glu Thr Pro Arg Arg Arg Met Lys Lys Ser  
                   180                                  185                                  190  
 Leu Ser Ala Pro Leu His Pro Glu Phe Glu Glu Val Tyr Arg Phe Gly  
                   195                                  200                                  205  
 Ala Glu Ser Arg Lys Leu Leu Leu Arg Glu Pro Val Asp Ala Met Pro  
                   210                                  215                                  220  
 Asp Pro Thr Pro Phe Leu Leu Ala Arg Glu Ser Ala Glu Val His Leu  
                   225                                  230                                  235                                  240  
 Ile Lys Glu Arg Pro Leu Val Ile Pro Pro Ile Ala Ser Asp Arg Ser  
                   245                                  250                                  255  
 Gly Glu Gln His Ser Pro Ala Arg Glu Lys Pro His Lys Ala His Val  
                   260                                  265                                  270  
 Gly Val Ala His Arg Ile His His Ala Thr Pro Pro Gln Ala Gln Pro  
                   275                                  280                                  285  
 Glu Val Lys Thr Leu Ala Val Asp Gln Val Asn Gly Gly Lys Val Val  
                   290                                  295                                  300



Arg Lys His Ser Gly Thr Asp Arg Thr Val

305

310

<210> 3768

<211> 274

<212> PRT

<213> Homo sapiens

<400> 3768

Met Thr Arg Ala Val Asn Leu Ser Cys Glu Thr Thr Glu Gly Glu Thr

1

5

10

15

Thr Phe Ser Lys Asn Arg Ala Gln Thr Val Pro Val Ser Leu Ser Pro

20

25

30

Asn Cys Ser Met Ala Trp Ser Ala Ala Asn Val Ser Ala Ala Leu Lys

35

40

45

Gly Lys Ala Leu Leu Trp Ser Gln His Ala Glu Leu Ala Ser Thr Pro

50

55

60

Leu Arg Ala Ala Pro His Gln His Trp Leu Gly Leu Asn Leu Ser Ser

65

70

75

80

Leu Ala Pro Arg Cys Lys Pro Trp Asn Ala Asn Pro Lys Gly Gln Thr

85

90

95

Pro Arg Gly Ser Gln Val Pro Gly Ala Asp Thr Phe Leu Ala Leu Ala

100

105

110

Val Met Ala Gln Met Glu Ala Lys Thr Thr Pro Leu Ser Thr Gly Arg

115

120

125

Leu Val Leu Leu Pro Arg Glu Gln Glu Pro Arg His Arg Leu Cys Thr

130

135

140

Glu Phe Ser Ile Tyr Phe Ser Gln Gly Gly Tyr Ala Lys Ala Val Cys

145

150

155

160

Leu Ser Leu Ser Gly Ser His Leu Gln Pro Val Pro Val Asp Ser Val

165

170

175

Gly Ser Thr Val Met Leu Gly Lys Asp Pro Asn Thr Arg Thr Lys His

180

185

190

Val Asp Ser Cys Gln Cys Gln Asn Gly Arg Lys Gln Gly Lys Gly Ser

195

200

205

Trp Leu Arg Pro Phe Ala Asn Arg Val Gln Arg Cys Arg His Leu Glu  
 210 215 220  
 Pro Ala Arg Ser Tyr Gln Thr Gly Ser His Leu Cys Leu Gln Arg Leu  
 225 230 235 240  
 Leu Ser Gln Arg Gln Asp Arg Gly Ala Trp Leu Cys Gln Val Ser Phe  
 245 250 255  
 Trp Asp Glu Pro Ile Leu Leu Ser Gln Val Gly His Asp Gly Glu Ala  
 260 265 270  
 Arg Arg

<210> 3769

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3769

Met Arg Asn His Phe Lys Phe Leu Ser Lys Lys Asp Lys Met Ala Ala  
 1 5 10 15  
 Ala Arg Arg Arg Ala Trp Arg Glu Gly Glu Arg Ala Ala Gly Ser Leu  
 20 25 30  
 Thr Arg Gly Leu Gln Leu Glu Pro Trp His Trp Gln Gly Ala Trp Arg  
 35 40 45  
 Arg Lys Arg Arg Lys Thr Val Ser Arg Gln Asp His Pro Asn Arg Ser  
 50 55 60  
 Ser Lys Leu Pro Trp Thr Ser Leu Pro Cys Pro His Arg Glu Ala Ala  
 65 70 75 80  
 Gly Asp Arg Ala Tyr Leu Gly Asn Thr Asn His Gly Ser Asp Thr Ser  
 85 90 95  
 Glu Met Ser Cys Arg Ala Ser Ala Ser Thr Leu Ile Gln Thr Leu Ser  
 100 105 110  
 Phe Ser Glu Leu Leu Gln Ala Pro Gly  
 115 120

&lt;210&gt; 3770

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3770

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Met Gly Gln Val Trp Asn Leu Gly Ala Cys Gln Lys Gly Glu Arg Leu
  1             5             10             15
Cys Gly Gln Thr His Leu Ala Cys Asn Pro Pro Leu Asn Ala Met His
          20             25             30
Val Thr Leu Gly Ala Ser Leu Asn Phe Cys Gly His Gln Cys Pro His
      35             40             45
Leu Gln Lys Cys Lys Trp Gln His Leu Phe Arg Ile Phe Leu Ile Arg
      50             55             60
Ile Asp Glu Ile Leu Leu Lys Ile Ser Ser Thr Trp Gly Ala Pro Arg
      65             70             75             80
Lys Ala Ser Ser Tyr His Phe Phe Asn Ala Ser Ser Ser Trp Val Ser
          85             90             95
Lys Thr Ser Ile Ser Gln Pro Phe Pro Cys Leu Gln Asn Thr Gln Asn
          100             105             110
Met Ala Leu Phe Val Trp His Arg Gly Met Trp Arg Gln Glu Val Ser
          115             120             125
Gly Gly Tyr Val Gly Cys Arg Cys Pro Ser Ser Cys Ser Leu Gly Ala
          130             135             140
Ile Pro Gly
145

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&lt;210&gt; 3771

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3771

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Met Cys Val Cys Met Ser Leu Thr Ser Ile Ser Gly Arg Val Thr Lys
  1             5             10             15

```

Asn Leu Ser Ile His Pro Arg Gln Gln Gly Cys Phe Ile Leu Arg Ala  
                   20                                  25                                  30  
 Arg Leu Gly Phe Glu Gly Asp Phe Ile Arg Met Glu Ser Leu Trp Leu  
                   35                                  40                                  45  
 Thr Asn Asn Cys Leu Leu Lys Tyr Gln Ala Leu Leu Leu Lys Gly Ser  
                   50                                  55                                  60  
 Ala Val Gln Leu Lys Thr Cys Pro Cys Leu Ser Pro Ala Thr Phe Ser  
                   65                                  70                                  75                                  80  
 Gln Arg Lys Leu Glu Asn Leu Asn Met Ile Val Asn Arg Met Ala Ser  
                                   85                                  90                                  95  
 Gly Gly Leu Gly Leu Leu Gly Glu Thr Glu Asn Ala Pro Gln Ile Pro  
                   100                                  105                                  110  
 Phe

<210> 3772

<211> 850

<212> PRT

<213> Homo sapiens

<400> 3772

Met Ile Ala Asn Ile Ser Pro Ser His Val Ala Thr Glu His Thr Leu  
   1                                  5                                  10                                  15  
 Asn Thr Leu Arg Tyr Ala Asp Arg Val Lys Glu Leu Lys Lys Gly Ile  
                   20                                  25                                  30  
 Lys Cys Cys Thr Ser Val Thr Ser Arg Asn Arg Thr Ser Gly Asn Ser  
                   35                                  40                                  45  
 Ser Pro Lys Arg Ile Gln Ser Ser Pro Gly Ala Leu Ser Glu Asp Lys  
                   50                                  55                                  60  
 Cys Ser Pro Lys Lys Val Lys Leu Gly Phe Gln Gln Ser Leu Thr Val  
                   65                                  70                                  75                                  80  
 Ala Ala Pro Gly Ser Thr Arg Gly Lys Val His Pro Leu Thr Ser His  
                                   85                                  90                                  95  
 Pro Pro Asn Ile Pro Phe Thr Ser Ala Pro Lys Val Ser Gly Lys Arg  
                   100                                  105                                  110

Gly Gly Ser Arg Gly Ser Pro Ser Gln Glu Trp Val Ile His Ala Ser  
 115 120 125  
 Pro Val Lys Gly Thr Val Arg Ser Gly His Val Ala Lys Lys Lys Pro  
 130 135 140  
 Glu Glu Ser Ala Pro Leu Cys Ser Glu Lys Asn Arg Met Gly Asn Lys  
 145 150 155 160  
 Thr Val Leu Gly Trp Glu Ser Arg Ala Ser Gly Pro Gly Glu Gly Leu  
 165 170 175  
 Val Arg Gly Lys Leu Ser Thr Lys Cys Lys Lys Val Gln Thr Val Gln  
 180 185 190  
 Pro Val Gln Lys Gln Leu Val Ser Arg Val Glu Leu Ser Phe Gly Asn  
 195 200 205  
 Ala His His Arg Ala Glu Tyr Ser Gln Asp Ser Gln Arg Gly Thr Pro  
 210 215 220  
 Ala Arg Pro Ala Ser Glu Ala Trp Thr Asn Ile Pro Pro His Gln Lys  
 225 230 235 240  
 Glu Arg Glu Glu His Leu Arg Phe Tyr His Gln Gln Phe Gln Gln Pro  
 245 250 255  
 Pro Leu Leu Gln Gln Lys Leu Lys Tyr Gln Pro Leu Lys Arg Ser Leu  
 260 265 270  
 Arg Gln Tyr Arg Pro Pro Glu Gly Gln Leu Thr Asn Glu Thr Pro Pro  
 275 280 285  
 Leu Phe His Ser Tyr Ser Glu Asn His Asp Gly Ala Gln Val Glu Glu  
 290 295 300  
 Leu Asp Asp Ser Asp Phe Ser Glu Asp Ser Phe Ser His Ile Phe Ser  
 305 310 315 320  
 Gln Arg Ala Thr Lys Gln Arg Asn Thr Leu Glu Asn Ser Glu Asp Ser  
 325 330 335  
 Phe Phe Leu His Gln Thr Trp Gly Gln Gly Pro Glu Lys Gln Val Ala  
 340 345 350  
 Glu Arg Gln Gln Ser Leu Phe Ser Ser Pro Arg Thr Gly Asp Lys Lys  
 355 360 365  
 Asp Leu Thr Lys Ser Trp Val Asp Ser Arg Asp Pro Ile Asn His Arg  
 370 375 380  
 Arg Ala Ala Leu Asp His Ser Cys Ser Pro Ser Lys Gly Pro Val Asp  
 385 390 395 400

Trp Ser Arg Glu Asn Ser Thr Ser Ser Gly Pro Ser Pro Arg Asp Ser			
405	410	415	
Leu Ala Glu Lys Pro Tyr Cys Ser Gln Val Asp Phe Ile Tyr Arg Gln			
420	425	430	
Glu Arg Gly Gly Gly Ser Ser Phe Asp Leu Arg Lys Asp Ala Ser Gln			
435	440	445	
Ser Glu Val Ser Gly Glu Asn Glu Gly Asn Leu Pro Ser Pro Glu Glu			
450	455	460	
Asp Gly Phe Thr Ile Ser Leu Ser His Val Ala Val Pro Gly Ser Pro			
465	470	475	480
Asp Gln Arg Asp Thr Val Thr Thr Pro Leu Arg Glu Val Ser Ala Asp			
485	490	495	
Gly Pro Ile Gln Val Thr Ser Thr Val Lys Asn Gly His Ala Val Pro			
500	505	510	
Gly Glu Asp Pro Arg Gly Gln Leu Gly Thr His Ala Glu Tyr Ala Ser			
515	520	525	
Gly Leu Met Ser Pro Leu Thr Met Ser Leu Leu Glu Asn Pro Asp Asn			
530	535	540	
Glu Gly Ser Pro Pro Ser Glu Gln Leu Val Gln Asp Gly Ala Thr His			
545	550	555	560
Ser Leu Val Ala Glu Ser Thr Gly Gly Pro Val Val Ser His Thr Val			
565	570	575	
Pro Ser Gly Asp Gln Glu Ala Ala Leu Pro Val Ser Ser Ala Thr Arg			
580	585	590	
His Leu Trp Leu Ser Ser Ser Pro Pro Asp Asn Lys Pro Gly Gly Asp			
595	600	605	
Leu Pro Ala Leu Ser Pro Ser Pro Ile Arg Gln His Pro Ala Asp Lys			
610	615	620	
Leu Pro Ser Arg Glu Ala Asp Leu Gly Glu Ala Cys Gln Ser Arg Glu			
625	630	635	640
Thr Val Leu Phe Ser His Glu His Met Gly Ser Glu Gln Tyr Asp Ala			
645	650	655	
Asp Ala Glu Glu Thr Gly Leu Asp Gly Ser Trp Gly Phe Pro Gly Lys			
660	665	670	
Pro Phe Thr Thr Ile His Met Gly Val Pro His Ser Gly Pro Thr Leu			
675	680	685	

Thr Pro Arg Thr Gly Ser Ser Asp Val Ala Asp Gln Leu Trp Ala Gln  
 690 695 700  
 Glu Arg Lys His Pro Thr Arg Leu Gly Trp Gln Glu Phe Gly Leu Ser  
 705 710 715 720  
 Thr Asp Pro Ile Lys Leu Pro Cys Asn Ser Glu Asn Val Thr Trp Leu  
 725 730 735  
 Lys Pro Arg Pro Ile Ser Arg Cys Leu Ala Arg Pro Ser Ser Pro Leu  
 740 745 750  
 Val Pro Ser Cys Ser Pro Lys Thr Ala Gly Thr Leu Arg Gln Pro Thr  
 755 760 765  
 Leu Glu Gln Ala Gln Gln Val Val Ile Arg Ala His Gln Glu Gln Leu  
 770 775 780  
 Asp Glu Met Ala Glu Leu Gly Phe Lys Glu Glu Thr Leu Met Ser Gln  
 785 790 795 800  
 Leu Ala Ser Asn Asp Phe Glu Asp Phe Val Thr Gln Leu Asp Glu Ile  
 805 810 815  
 Met Val Leu Lys Ser Lys Cys Ile Gln Ser Leu Arg Ser Gln Leu Gln  
 820 825 830  
 Leu Tyr Leu Thr Cys His Gly Pro Thr Ala Ala Pro Glu Gly Thr Val  
 835 840 845  
 Pro Ser  
 850

<210> 3773

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3773

Met Arg Gly Leu Pro Val Cys Leu Ala Gln Asn Ser Ser Pro Ala Pro  
 1 5 10 15  
 Val Asn Thr Trp Leu Ala Thr Ala Leu Lys Pro Arg Gly Leu Ser Thr  
 20 25 30  
 Thr Pro Gly Gly Gly Gly Leu Lys Arg Lys Gly Gln Lys Gln Val Ala  
 35 40 45

Ser Ala Gly Gln Val Gln Trp Gly Phe Ser Gln Thr His Thr Ile Lys  
 50 55 60  
 Cys Val Cys Arg Leu Thr Val Ser Pro Ala Gly Gly Phe Gln Gly Pro  
 65 70 75 80  
 Pro Val Ser Leu Leu Ser Trp Asp Met Tyr Leu Leu Ile Met Pro Leu  
 85 90 95  
 Ser Met Leu Trp Leu Met  
 100

<210> 3774

<211> 243

<212> PRT

<213> Homo sapiens

<400> 3774

Met Met Gly Ser Arg Arg Lys Val Leu Leu Thr Ser Gln Met Gly Gln  
 1 5 10 15  
 Leu Gly Lys Gly Ala Pro His Phe Pro Asp Gly Val Ala Val Arg Gln  
 20 25 30  
 Arg Cys Ser Ser Gln Pro Arg Arg Gly Ser Gln Ala Val Ala Leu Leu  
 35 40 45  
 Thr Ser Gln Thr Gly Leu Pro Gly Arg Gly Ala Pro His Phe Pro Glu  
 50 55 60  
 Gly Val Ala Gly Gln Arg Arg Ser Ser Thr Ala Arg Leu Gly Ser Arg  
 65 70 75 80  
 Gln Glu Glu Leu Leu Thr Ser Lys Met Met Gly Gly Arg Ala Glu Ala  
 85 90 95  
 Leu Pro Thr Ser Gln Thr Gly Arg Pro Gly Arg Gly Ala Pro His Leu  
 100 105 110  
 Pro Asp Arg Val Ala Gly Gln Arg Arg Ser Ser Pro Pro Arg Arg Gly  
 115 120 125  
 Gly Arg Ala Glu Ala Leu His Thr Ser Gln Met Gly Trp Trp Pro Asp  
 130 135 140  
 Arg Gly Ala Pro His Asn Leu Asp Gly Ala Ala Gly Gln Arg His Ser  
 145 150 155 160



Pro Leu Pro Arg Arg Gly Ser Arg Ala Glu Trp Pro Gly Arg Gly Thr  
                   165                  170                  175  
 Pro His Asn Pro Asp Gly Ala Ala Gly Gln Arg Arg Ser Ser Pro Pro  
                   180                  185                  190  
 Arg Trp Gly Ser Arg Glu Glu Ala Leu Leu Thr Ser Gln Thr Leu Gly  
                   195                  200                  205  
 Gly Gln Ala Glu Ala Leu Leu Thr Ser Gln Met Gly Trp Leu Gly Arg  
                   210                  215                  220  
 Gly Ala Pro His Phe Pro Asp Lys Val Ala Gly Gln Arg Arg Tyr Ser  
 225                  230                  235                  240  
 Pro Pro Arg

<210> 3775

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3775

Met Gly Glu Thr Gln Gly Pro Gly Pro Gln Phe Ser Val Leu Cys Pro  
   1                  5                  10                  15  
 Ser Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn  
                   20                  25                  30  
 Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser  
                   35                  40                  45  
 Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala Trp  
                   50                  55                  60  
 Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala Leu  
   65                  70                  75                  80  
 Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu Leu  
                   85                  90                  95  
 Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu Ile  
                   100                  105                  110  
 Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr Ala  
                   115                  120                  125

Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile Asp  
 130 135 140  
 Arg Arg Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile Tyr  
 145 150 155 160  
 Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu Leu  
 165 170 175  
 Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg Arg  
 180 185 190  
 Met Gly Val Arg Pro Ala Val Pro Leu Leu Thr Gln Arg Gly Ser Gly  
 195 200 205  
 Glu Ala Glu Val Ser Gly Ser Leu Arg Lys Leu Pro Lys Val Ala Gln  
 210 215 220  
 Leu Arg Arg Gly Thr Ala Gly Met Gln Thr Gln Pro Val Thr Thr Ser  
 225 230 235 240  
 Pro Ala Ser Thr Pro Arg Pro Ser Cys Leu Leu Pro Met Tyr Ser Asp  
 245 250 255  
 Thr Arg Ala Arg Ser Ser Asp Asp Ser Thr Ala Ser Trp Trp Ala Leu  
 260 265 270  
 Arg Pro Cys Arg Pro Gln Ala Arg Pro  
 275 280

<210> 3776

<211> 470

<212> PRT

<213> Homo sapiens

<400> 3776

Met Asn Glu Glu Asn Ile Asp Gly Thr Asn Gly Cys Ser Lys Val Arg  
 1 5 10 15  
 Thr Gly Ile Gln Asn Glu Ala Ala Leu Leu Ala Leu Met Glu Lys Thr  
 20 25 30  
 Gly Tyr Asn Met Val Gln Glu Asn Gly Gln Arg Lys Phe Gly Gly Pro  
 35 40 45  
 Pro Pro Gly Trp Glu Gly Pro Pro Pro Pro Arg Gly Cys Glu Val Phe  
 50 55 60

Val Gly Lys Ile Pro Arg Asp Met Tyr Glu Asp Glu Leu Val Pro Val  
 65 70 75 80  
 Phe Glu Arg Ala Gly Lys Ile Tyr Glu Phe Arg Leu Met Met Glu Phe  
 85 90 95  
 Ser Gly Glu Asn Arg Gly Tyr Ala Phe Val Met Tyr Thr Thr Lys Glu  
 100 105 110  
 Glu Ala Gln Leu Ala Ile Arg Ile Leu Asn Asn Tyr Glu Ile Arg Pro  
 115 120 125  
 Gly Lys Phe Ile Gly Val Cys Val Ser Leu Asp Asn Cys Arg Leu Phe  
 130 135 140  
 Ile Gly Ala Ile Pro Lys Glu Lys Lys Lys Glu Glu Ile Leu Asp Glu  
 145 150 155 160  
 Met Lys Lys Val Thr Glu Gly Val Val Asp Val Ile Val Tyr Pro Ser  
 165 170 175  
 Ala Thr Asp Lys Thr Lys Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu  
 180 185 190  
 Ser His Arg Ala Ala Ala Met Ala Arg Arg Lys Leu Ile Pro Gly Thr  
 195 200 205  
 Phe Gln Leu Trp Gly His Thr Ile Gln Val Asp Trp Ala Asp Pro Glu  
 210 215 220  
 Lys Glu Val Asp Glu Glu Thr Met Gln Arg Val Lys Val Leu Tyr Val  
 225 230 235 240  
 Arg Asn Leu Met Ile Ser Thr Thr Glu Glu Thr Ile Lys Ala Glu Phe  
 245 250 255  
 Asn Lys Phe Lys Pro Gly Ala Val Glu Arg Val Lys Lys Leu Arg Asp  
 260 265 270  
 Tyr Ala Phe Val His Phe Phe Asn Arg Glu Asp Ala Val Ala Ala Met  
 275 280 285  
 Ser Val Met Asn Gly Lys Cys Ile Asp Gly Ala Ser Ile Glu Val Thr  
 290 295 300  
 Leu Ala Lys Pro Val Asn Lys Glu Asn Thr Trp Arg Gln His Leu Asn  
 305 310 315 320  
 Gly Gln Ile Ser Pro Asn Ser Glu Asn Leu Ile Val Phe Ala Asn Lys  
 325 330 335  
 Glu Glu Ser His Pro Lys Thr Leu Gly Lys Leu Pro Thr Leu Pro Ala

340 345 350  
 Arg Leu Asn Gly Gln His Ser Pro Ser Pro Pro Glu Val Glu Arg Cys  
 355 360 365  
 Thr Tyr Pro Phe Tyr Pro Gly Thr Lys Leu Thr Pro Ile Ser Met Tyr  
 370 375 380  
 Ser Leu Lys Ser Asn His Phe Asn Ser Ala Val Met His Leu Asp Tyr  
 385 390 395 400  
 Tyr Cys Asn Lys Asn Asn Trp Ala Pro Pro Glu Tyr Tyr Leu Tyr Ser  
 405 410 415  
 Thr Thr Ser Gln Asp Gly Lys Val Leu Leu Val Tyr Lys Ile Val Ile  
 420 425 430  
 Pro Ala Ile Ala Asn Gly Ser Gln Ser Tyr Phe Met Pro Asp Lys Leu  
 435 440 445  
 Cys Thr Thr Leu Glu Asp Ala Lys Glu Leu Ala Ala Gln Phe Thr Leu  
 450 455 460  
 Leu His Leu Gly Pro Phe  
 465 470

<210> 3777

<211> 382

<212> PRT

<213> Homo sapiens

<400> 3777

Met Phe Cys Leu Glu Ala Ile Val Lys His Ser Glu Ile Ser Thr His  
 1 5 10 15  
 Cys Asp Lys Ile Glu Ala Asn Gly Gly Leu Gln Leu Leu Gln Arg Leu  
 20 25 30  
 Tyr Arg Leu His Lys Asp Cys Pro Lys Val Gln Arg Asn Ile Met Arg  
 35 40 45  
 Val Ile Gly Asn Met Ala Leu Asn Glu His Leu His Ser Ser Ile Val  
 50 55 60  
 Arg Ser Gly Trp Val Ser Ile Met Ala Glu Ala Met Lys Ser Pro His  
 65 70 75 80  
 Ile Met Glu Ser Ser His Ala Ala Arg Ile Leu Ala Asn Leu Asp Arg

	85		90		95
Glu Thr Val Gln Glu Lys Tyr Gln Asp Gly Val Tyr Val Leu His Pro					
	100		105		110
Gln Tyr Arg Thr Ser Gln Pro Ile Lys Ala Asp Val Leu Phe Ile His					
	115		120		125
Gly Leu Met Gly Ala Ala Phe Lys Thr Trp Arg Gln Gln Asp Ser Glu					
	130		135		140
Gln Ala Val Ile Glu Lys Pro Met Glu Asp Glu Asp Arg Tyr Thr Thr					
145		150		155	160
Cys Trp Pro Lys Thr Trp Leu Ala Lys Asp Cys Pro Ala Leu Arg Ile					
	165		170		175
Ile Ser Val Glu Tyr Asp Thr Ser Leu Ser Asp Trp Arg Ala Arg Cys					
	180		185		190
Pro Met Glu Arg Lys Ser Ile Ala Phe Arg Ser Asn Glu Leu Leu Arg					
	195		200		205
Lys Leu Arg Ala Ala Gly Val Gly Asp Arg Pro Val Val Trp Ile Ser					
	210		215		220
His Ser Met Gly Gly Leu Leu Val Lys Lys Met Leu Leu Glu Ala Ser					
225		230		235	240
Thr Lys Pro Glu Met Ser Thr Val Ile Asn Asn Thr Arg Gly Ile Ile					
	245		250		255
Phe Tyr Ser Val Pro His His Gly Ser Arg Leu Ala Glu Tyr Ser Val					
	260		265		270
Asn Ile Arg Tyr Leu Leu Phe Pro Ser Leu Glu Val Lys Glu Leu Ser					
	275		280		285
Lys Asp Ser Pro Ala Leu Lys Thr Leu Gln Asp Asp Phe Leu Glu Phe					
	290		295		300
Ala Lys Asp Lys Asn Phe Gln Val Leu Asn Phe Val Glu Thr Leu Pro					
305		310		315	320
Thr Tyr Ile Gly Ser Met Ile Lys Leu His Val Val Pro Val Glu Ser					
	325		330		335
Ala Asp Leu Gly Ile Gly Asp Leu Ile Pro Val Asp Val Asn His Leu					
	340		345		350
Asn Ile Cys Lys Pro Lys Lys Lys Asp Ala Phe Leu Tyr Gln Arg Thr					
	355		360		365
Leu Gln Phe Ile Arg Glu Ala Leu Ala Lys Asp Leu Glu Asn					

370

375

380

&lt;210&gt; 3778

&lt;211&gt; 164

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3778

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Met Phe Gln Arg Leu Asn Lys Met Phe Val Gly Glu Val Ser Ser Ser
  1             5             10             15
Ser Asn Gln Glu Pro Glu Phe Asn Glu Lys Glu Asp Asp Glu Trp Ile
      20             25             30
Leu Val Asp Phe Ile Asp Thr Cys Thr Gly Phe Ser Ala Glu Gly Glu
      35             40             45
Glu Glu Glu Glu Asp Ile Ser Glu Glu Ser Pro Thr Glu His Pro Ser
      50             55             60
Val Phe Ser Cys Leu Pro Ala Ser Leu Glu Cys Leu Ala Asp Thr Ser
      65             70             75             80
Asp Ser Cys Phe Leu Gln Phe Glu Ser Cys Pro Met Glu Glu Ser Trp
      85             90             95
Phe Ile Thr Pro Pro Pro Cys Phe Thr Ala Gly Gly Leu Thr Thr Ile
      100            105            110
Lys Val Glu Thr Ser Pro Met Glu Asn Leu Leu Ile Glu His Pro Ser
      115            120            125
Met Ser Val Tyr Ala Val His Asn Ser Cys Pro Gly Leu Ser Glu Ala
      130            135            140
Thr Arg Gly Thr Asp Glu Leu His Ser Pro Ser Ser Pro Arg Ala Arg
      145            150            155            160
Lys Ser Cys Leu

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&lt;210&gt; 3779

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3779

Met Trp Pro Asp Gly Ser Ser Phe Thr Gly Thr Phe Tyr Leu Ser His  
 1 5 10 15  
 Arg Glu Gly Tyr Gly Thr Met Tyr Met Lys Thr Arg Leu Phe Gln Thr  
 20 25 30  
 His Cys His Asn Asp Ile Val Asn Leu Leu Leu Asp Cys Gly Ala Asp  
 35 40 45  
 Val Asn Lys Cys Ser Asp Glu Gly Leu Thr Ala Leu Ser Met Cys Phe  
 50 55 60  
 Leu Leu His Tyr Pro Ala Gln Ser Phe Lys Pro Asn Val Ala Glu Arg  
 65 70 75 80  
 Thr Ile Pro Glu Pro Gln Glu Pro Pro Lys Phe Pro Val Val Pro Ile  
 85 90 95  
 Leu Ser Ser Ser Phe Met Asp Thr Asn Leu Glu Ser Leu Tyr Tyr Glu  
 100 105 110  
 Val Asn Val Pro Ser Gln Gly Ser Tyr Glu Leu Arg Pro Pro Pro Ala  
 115 120 125  
 Pro Leu Leu Leu Pro Arg Val Ser Gly Ser His Glu Gly Gly His Phe  
 130 135 140  
 Gln Asp Thr Gly Gln Cys Gly Gly Ser Met Asp His Arg Ser Ser Ser  
 145 150 155 160  
 Leu Lys Gly Asp Ser Pro Leu Val Lys Gly Ser Leu Gly His Val Glu  
 165 170 175  
 Ser Gly Leu Glu Asp Val Leu Gly Asn Thr Asp Arg Gly Ser Leu Cys  
 180 185 190  
 Ser Ala Glu Thr Lys Phe Glu Ser Asn Val Cys Val Cys Asp Phe Ser  
 195 200 205  
 Ile Glu Leu Ser Gln Ala Met Leu Glu Arg Ser Ala Gln Ser His Ser  
 210 215 220  
 Leu Leu Lys Met Ala Ser Pro Ser Pro Cys Thr Ser Ser Phe Asp Lys  
 225 230 235 240  
 Gly Thr Met Arg Arg Met Ala Leu Ser Met Ile Glu  
 245 250

&lt;210&gt; 3780

&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3780

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Met Phe Cys Phe Asp Asn Thr Phe Ser Thr Ile Ser Glu Lys Val Ile
  1             5             10            15
Phe Phe Glu Leu Ile Leu Asp Asn Met Gly Glu Gln Ala Gln Glu Gln
      20             25            30
Glu Asp Trp Lys Lys Tyr Ile Thr Gly Thr Asp Ile Leu Asp Met Lys
      35             40            45
Leu Glu Asp Ile Leu Glu Ser Ile Asn Ser Ile Lys Ser Arg Leu Ser
      50             55            60
Lys Ser Gly His Ile Gln Ile Leu Leu Arg Ala Phe Glu Ala Arg Asp
      65             70            75            80
Arg Asn Ile Gln Glu Ser Asn Phe Asp Arg Val Asn Phe Trp Ser Met
      85             90            95
Val Asn Leu Val Val Met Val Val Val Ser Ala Ile Gln Val Tyr Met
      100            105            110
Leu Lys Ser Leu Phe Glu Asp Lys Arg Lys Ser Arg Thr
      115            120            125

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&lt;210&gt; 3781

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3781

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Met Ser Cys Ser Pro Asn Arg Ala Gly His Ser Trp Glu Lys Arg Gly
  1             5             10            15
Gln Pro Leu Gly Val Val Arg Pro Leu Pro Ala Pro Thr Leu Ser Leu
      20             25            30
Val Leu Leu Ser Trp Ser Pro Pro Ile Ala Ser Val Val Pro His Asn

```



35 40 45  
 Arg Val Trp Leu Cys Ala Gly Pro Gly Ser Gln Glu Ser Leu Pro Ser  
 50 55 60  
 Glu Arg Glu Cys Val Phe Leu Leu Pro Leu Pro Phe Pro Ser Met Ala  
 65 70 75 80  
 Leu Leu Leu Pro Ser Pro Arg Thr Ser Pro Ser Leu Gly Asp Ala Phe  
 85 90 95  
 Cys Ser Leu Gln Pro Cys Pro Leu Leu Ser Phe Arg Val Ser Arg Glu  
 100 105 110  
 Pro Leu Arg Ile Ala Thr Cys Arg Gly Ala Val Leu Ser Pro Gln Phe  
 115 120 125  
 Leu Ser Leu Trp Tyr Leu Met Leu Leu Thr Thr Ala Ser Phe Leu Thr  
 130 135 140  
 Ser Gly Phe Leu Thr Pro Phe Pro Ala Cys Ala Leu Ala Ala Ser Pro  
 145 150 155 160  
 Pro Cys Thr Gly Phe Arg Gly Cys Ser Ala Pro Gly Ala Ala Gln Ala  
 165 170 175  
 Cys Pro Leu

<210> 3782

<211> 1028

<212> PRT

<213> Homo sapiens

<400> 3782

Met Asp Asp Gln Tyr Arg Thr Leu Met Arg Ile Ser Val Ala Asp Pro  
 1 5 10 15  
 Met Val Leu Ser Leu Val Val Pro Ser Ala Glu Arg Ser Pro Tyr Phe  
 20 25 30  
 Gln Gly Gln Gln Leu Gln Gln Leu Leu Gln Ala Gly Ser Val Glu Leu  
 35 40 45  
 Glu Gly Ile Ile Met Ser Leu Glu Ser Val Leu Tyr Gly Val Cys Ala  
 50 55 60  
 His Phe Pro Arg Leu Phe Phe Leu Ser Asp Ser Glu Leu Val Ala Leu

65	70	75	80
Leu Ala Ala Arg	Leu Glu Ser Cys Glu Ala Gln	Leu Trp Val Arg Arg	
85	90	95	
Cys Phe Pro His Val His Ala Val Ser Phe Arg Ser Cys Pro Thr Gly			
100	105	110	
Glu Lys Asn Thr Asp Asp Trp Glu Ser Ser Pro Asn Thr Gln Thr Gln			
115	120	125	
Val Glu Ala Leu Ala Val Leu Gly Ala Gly Gly Glu Glu Val Lys Leu			
130	135	140	
Gln Gly Pro Leu Pro Leu His Pro Asp Leu Pro Lys Trp Leu Ala Ser			
145	150	155	160
Leu Glu Lys Cys Leu Arg Leu Ala Leu Val His Met Leu Gln Gly Cys			
165	170	175	
Val Ala Ala Arg Leu Ala Arg Gly Pro Ser Leu Gly Glu Ala Leu Lys			
180	185	190	
Gln Leu Pro Lys Gln Asn Lys Leu Tyr Leu Gln Leu Tyr Val Gln His			
195	200	205	
Trp Ile Asp Leu Val Gln Ala Phe Pro Trp Gln Cys Val Leu Val Ala			
210	215	220	
Glu Glu Val Val Trp Arg Ala Glu Met Glu Glu Ala Leu Leu Glu Trp			
225	230	235	240
Gly Thr Leu Ala Met Val Ser Met His Met Arg Lys Leu Glu Val Leu			
245	250	255	
Val Asn Phe Met Arg Ala Gln Arg Ala Ser Gln Gly Gly Gln Ser Leu			
260	265	270	
Pro Ser Val Arg Gln Thr Ser Leu Leu Ser Ala Leu Leu Val Met Ala			
275	280	285	
Val Thr His Arg Asp Ile Ala Gln Leu Leu Glu Gln His Gln Val Ser			
290	295	300	
Asp Leu Thr Asp Phe His Trp Val Arg Gln Leu Lys Tyr His Leu Gly			
305	310	315	320
Ser Pro His Ile Ile Pro Lys Ser Pro Leu Gln Ser Leu Lys Thr Ile			
325	330	335	
Ala Ser Ser Glu Pro Ser Leu Ser Pro Ala Ala Cys Trp Ile Asp Val			
340	345	350	
Leu Gly Arg Ser Phe Leu Tyr Asn Tyr Glu Tyr Leu Gly Pro Arg Leu			

355	360	365
Gly Pro Leu Pro Ser Leu Leu Pro Glu Arg Pro Ala Leu Val Leu Leu		
370	375	380
Leu Ala Leu Glu Glu Val Ala Cys Gly Thr Val Leu Gly Pro Asn Gly		
385	390	395
		400
Val Gly Lys Arg Ala Ile Val Asn Ser Leu Ala Gln Ala Leu Gly Arg		
405	410	415
Gln Leu Val Met Leu Pro Cys Ser Pro Gln Ile Glu Ala Gln Cys Leu		
420	425	430
Ser Asn Tyr Leu Asn Gly Ala Leu Gln Gly Gly Ala Trp Leu Leu Leu		
435	440	445
Glu Lys Val His Gln Leu Pro Pro Gly Leu Leu Ser Ala Leu Gly Gln		
450	455	460
Arg Leu Gly Glu Leu His His Leu Tyr Ala Pro Leu Tyr Gln Glu Ala		
465	470	475
Ser Arg Asn Thr Ser Thr Ile Asp Pro Thr Gln Pro Gln Leu Leu Gly		
485	490	495
Ser Ser Phe Phe Glu Lys His His Val Ser Val Arg Leu Gly Tyr Gly		
500	505	510
Cys Leu Leu Val Leu Arg Ala Leu Ser Ser Ala Val Pro Ala Asn Leu		
515	520	525
His Leu Leu Leu Arg Pro Val Ala Leu Ala Leu Pro Asp Leu Arg Gln		
530	535	540
Val Ala Glu Leu Thr Leu Leu Gly Ala Gly Met Arg Asp Ala Phe Gln		
545	550	555
Met Ala Thr Arg Leu Ser Lys Phe Phe Ser Leu Glu Arg Glu Leu Val		
565	570	575
Ser Gly Pro Leu Pro Cys Arg Leu Pro Leu Leu Lys Gln Ile Leu Glu		
580	585	590
Asp Thr Ile Arg Thr Leu Asn Val Thr Lys Glu Glu Pro Lys Cys Gln		
595	600	605
Lys Pro Arg Ser Leu Ala Ala Ile Glu Glu Ala Ala Leu Leu His Ala		
610	615	620
Leu Leu Arg Ser Pro Leu Phe Ser Ile Leu Asn Gly Leu His Leu His		
625	630	635
		640

Asn Leu Arg Gly Leu Leu Cys Ala Leu Phe Pro Ser Ala Ser Gln Val			
645	650	655	
Leu Ala Glu Pro Met Thr Tyr Lys Leu Met Lys Pro Leu Val Val Glu			
660	665	670	
Glu Leu Gln Gln Val Gly Leu Asp Pro Ser Pro Asp Ile Leu Gly Ser			
675	680	685	
Leu Glu Gln Leu Ser Gln Ala Leu Ser Arg Ala Ser Gly Ile Leu Leu			
690	695	700	
Leu Gly Pro Ala Gly Ser Gly Lys Thr Ile Cys Trp His Ser Leu Phe			
705	710	715	720
Lys Ile Gln Asn Arg Leu Ala Ala Met Glu Asp Thr Ser Thr Gln Gly			
725	730	735	
Cys Gln Pro Val Glu Ile Thr His Leu Tyr Pro Ser Gly Leu Ser Pro			
740	745	750	
Gln Glu Phe Leu Gly Trp Leu Glu Gly Ser Cys Trp His His Gly Ile			
755	760	765	
Phe Pro Lys Val Leu Arg Ala Ala Gly Gln Cys Asn Asn Met Gly Gln			
770	775	780	
Lys Arg Gln Thr Glu Glu Ser Ile Gly Ile Gln His Trp Ile Ile Cys			
785	790	795	800
Asp Gly Ala Ser Asn Gly Ala Trp Leu Asp Ser Ile Thr Cys Leu Leu			
805	810	815	
Ser Glu Leu Pro Gln Leu Ser Leu Pro Ser Gly Gln Gln Ile Ala Arg			
820	825	830	
Pro Pro Gly Thr Phe Leu Leu Met Glu Val Ala Asp Thr Thr Gly Ile			
835	840	845	
Ser Pro Thr Val Val Gly Cys Cys Ala Leu Val Trp Cys Gly Gly Glu			
850	855	860	
Gln Thr Trp Gln Cys Ile Leu Ser Ala Leu Met Ala Ser Leu Pro Tyr			
865	870	875	880
Glu Tyr Arg Leu Gln His Arg Thr Val Ala Glu Leu Asn His Met Ala			
885	890	895	
Glu Val Leu Val Pro Ala Thr Leu Arg Phe Leu Thr Cys Gln Gly Val			
900	905	910	
Ser Ser Leu Leu Gln Val His Gly Gln Gln Ala Val Cys Ala Gly Val			
915	920	925	

Ala Glu Val Thr Ser Met Ala Arg Ile Leu His Ser Leu Leu Asp Leu  
 930 935 940  
 His Leu Arg Leu Lys Glu Glu Lys Ala Pro Gly Pro Glu Asp Leu Ser  
 945 950 955 960  
 Tyr Ser Asp Pro Val Ala Gln Ser Phe Arg Ser Ser Lys Ser Ser Phe  
 965 970 975  
 Leu Asn Arg Ser Gln Val Asp Ser Asp Asp Val Pro Asp Lys Cys Arg  
 980 985 990  
 Glu His Leu Leu Ala Val Ser Ser Phe Leu Phe Ala Leu Ile Trp Gly  
 995 1000 1005  
 Phe Gly Ala His Leu Pro Ser Arg Tyr Leu Pro Gly Trp Gly Met Gly  
 1010 1015 1020  
 Asp Ala Glu Gly  
 1025

<210> 3783

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3783

Met Asn His Ala Ser Cys Asn Thr Phe Ser Gln Thr Glu Thr Pro Lys  
 1 5 10 15  
 Tyr Ala Cys Asn Val Leu Thr Lys Lys Glu Ala Ile Val Gln Leu Ala  
 20 25 30  
 Lys His Leu Asn Leu Phe Arg Val Arg Glu Glu Ser Ser Asn Cys Leu  
 35 40 45  
 Asp Val Thr Trp Arg Glu Gly Cys Gly Lys His His Ser Leu Gln Ala  
 50 55 60  
 Pro Phe Ser Leu Cys Glu Ala Phe Ser Lys Met Gln Pro Ala Leu Thr  
 65 70 75 80  
 His Gln Ala Trp Phe Cys Ser Pro Cys His Arg Asp Pro Ala Gly Ser  
 85 90 95  
 Leu Ala Met Arg Arg Cys Asn Cys Val Ser Cys Gly Leu Leu Gln Lys

100 105 110  
 Asp Trp Pro Pro Pro Gln Thr  
 115

<210> 3784

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3784

Met Leu Leu His Gly Leu Ser Gln Ala Arg Pro Ser Val Gly Leu Glu  
 1 5 10 15  
 Gln Leu Ser Cys Gln Thr Leu Thr Arg Leu Gly Lys Gly Leu Val Thr  
 20 25 30  
 Gly Gln Phe Pro Ala Cys Arg Ala Pro Asn Cys Cys Ser Arg Gln Val  
 35 40 45  
 Pro Glu Arg Gln Phe Gln Ile Asn Ala Cys Pro Ser Gln Gly Thr Ala  
 50 55 60  
 Glu Arg Glu Arg Pro Glu Thr Ala Thr Thr Pro Phe Leu His Pro Leu  
 65 70 75 80  
 Cys Pro Pro Gly Ile Gln Leu Asn His Leu Leu Leu His Ile Leu Gly  
 85 90 95  
 Lys Lys Asp Asp Ala Val Leu Gly Pro Pro Ala Ile Asn Asp Arg Gln  
 100 105 110  
 Leu Phe Asp Leu Ala Gly Ser Gln Val Asp Val Phe Ser Gly Ala Gln  
 115 120 125  
 Leu Phe Leu Gln Pro Thr Ser Gln Val Asp Ser  
 130 135

<210> 3785

<211> 1224

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3785

Met Thr Cys Thr Lys Asn Pro Gln Asn Leu Asn Gln Ile His Glu Glu  
 1 5 10 15  
 Thr Ala Lys Lys Ala Gln Asn Leu Val Leu Pro Asn Arg Lys Ser Pro  
 20 25 30  
 Ser Pro Val Ala Pro His Pro Ser Thr Phe Val Ala Thr Pro Ala Ser  
 35 40 45  
 His Asn Leu Val Asn Gln Thr Asn Gly Thr Thr Lys Glu Ser Ala Leu  
 50 55 60  
 Leu Leu His Val Leu Leu Met Val Pro Asp Gly Lys Asp Phe Ile Ser  
 65 70 75 80  
 Gly Glu Ser Glu Lys Gln Ser Pro Cys Asn Val Tyr Leu Asn Cys Lys  
 85 90 95  
 Leu Phe Ser Thr Glu Glu Val Thr Arg Ser Val Ile Ala Trp Gly Thr  
 100 105 110  
 Thr Gln Pro Val Phe Asn Phe Ser Gln Val Ile Pro Val Ser Leu Ser  
 115 120 125  
 Ser Lys Tyr Leu Glu Arg Leu Lys Asn Asn Val Met Val Ile Glu Thr  
 130 135 140  
 Trp Asn Lys Val Arg Ser Pro Gly Gln Asp Lys Leu Leu Gly Leu Val  
 145 150 155 160  
 Lys Leu Pro Leu His Gln Phe Tyr Met Ser Phe Lys Asp Ala Lys Ile  
 165 170 175  
 Ser Arg Leu Leu Leu Asp Ala Gln Tyr Pro Val Val Ala Val Asp Ser  
 180 185 190  
 Tyr Met Pro Val Ile Asp Val Phe Ser Gly His Gln Asn Gly Ser Leu  
 195 200 205  
 Arg Val Phe Leu Ala Met Gly Ser Ser Asn Gln Ile Met Ala Leu Gln  
 210 215 220  
 Arg Leu Lys Asn Glu Glu Gly Thr Leu Pro Pro Phe Ser Pro Arg Pro  
 225 230 235 240  
 Ala His Phe Leu Asp Gln Pro Thr Ala Ala Ser Val Ala Met Ala Glu  
 245 250 255  
 Asp Arg Gly Asn Gly Leu Met Glu His Cys Phe Glu Ile His Ile Glu  
 260 265 270

Met Val Lys Gly Leu Ala Pro Leu Gln Ala Thr Val Trp Gly Glu Ala  
 275 280 285  
 Asp Cys Tyr Val Gln Tyr Tyr Phe Pro Val Gln His Ser Gln Ser Ser  
 290 295 300  
 Val Leu Lys Gly Pro Glu Phe Leu Glu Asn Gly Ile Thr Leu Lys Pro  
 305 310 315 320  
 Phe Arg Thr Ala Thr Thr Leu Cys Val Pro Asp Pro Ile Phe Asn Ser  
 325 330 335  
 Glu His His His Ser Leu Leu Leu Pro Ala Glu Val Pro Val Gln Arg  
 340 345 350  
 Leu Leu Leu Ser Ala Phe Ser Ala Gln Gly Leu Val Pro Gly Gly Gly  
 355 360 365  
 Val Gln Phe Glu Ile Trp Cys Arg Tyr Tyr Tyr Pro Asn Val Arg Asp  
 370 375 380  
 Gln Lys Val Ala Lys Gly Thr Leu Pro Leu Ser Arg Ile Cys Ala Met  
 385 390 395 400  
 Val Thr Thr Gln His Arg Glu Asp Val Gly Ile Gln Thr Phe Asn Leu  
 405 410 415  
 Pro Leu Thr Pro Arg Ile Glu Asn Arg Lys Glu Leu Arg Asn Gln Ser  
 420 425 430  
 Ser Gly Leu Leu Asp Val Gly Leu Arg Tyr Arg Arg Ser Pro Arg Thr  
 435 440 445  
 Ala Glu Gly Val Leu Ala Ala Arg Thr Val Ser Ile Ser Val Gln Ile  
 450 455 460  
 Ile Arg Ala Cys Gly Leu Gln Ala Ala Ala Lys Ala Leu Ala Glu Gln  
 465 470 475 480  
 Glu Pro Ala Leu Gln Phe Ser Ala Thr Val Gly Val Asn Ala Ser Val  
 485 490 495  
 Thr Thr His Leu Ser Phe Leu Pro Gln Gly Glu Gln Arg Arg Thr His  
 500 505 510  
 Pro Val Ala Cys Ser Phe Cys Pro Glu Phe Ser His His Val Glu Phe  
 515 520 525  
 Thr Cys Asn Leu Val Thr Gln His Cys Ser Gly Glu Ala Cys Phe Leu  
 530 535 540  
 Ala Glu Leu Leu Glu Phe Ala Glu Val Ile Phe Ala Val Tyr His Glu  
 545 550 555 560



Asn Thr Lys Ser Ala Ser Asp Ile Ile Ser Ile Glu Ser Cys Lys Glu			
565	570	575	
Tyr Leu Leu Gly Val Val Lys Val Pro Thr Lys Glu Leu Leu Ile Lys			
580	585	590	
Arg Ser Gly Ile Thr Gly Trp Tyr Pro Ile Ile Leu Pro Glu Asp Gly			
595	600	605	
Gly Leu Pro His Gly Leu Glu Leu Met Gln Lys Ile Val Gly Gly Leu			
610	615	620	
Glu Leu Ser Ile Ser Phe Thr His Arg Gly Asp Arg Glu Arg Val Leu			
625	630	635	640
Glu Ala Ala Glu His Leu Gly Trp Ser Phe Glu Asn Ser Leu Lys Asp			
645	650	655	
Phe Val Arg Met Asp Glu Gly Glu Pro Ala Thr Val Thr Ile Ser Thr			
660	665	670	
Pro Arg Leu Trp Leu Pro Ile His Cys Val Leu Leu Ala Gly His Asn			
675	680	685	
His Ile His Lys Asn Thr Tyr Cys Tyr Leu Arg Tyr Lys Phe Tyr Asp			
690	695	700	
His Glu Ala Phe Trp Thr Pro Leu Lys Lys Pro Lys Glu Ser Val Asn			
705	710	715	720
Lys Lys Gln Ile Met Val Thr Phe Lys Ala Ser Lys Arg Ala Glu Val			
725	730	735	
Thr Arg Gly Pro Ser Leu Leu Trp Tyr Phe Arg Glu Glu Arg Leu Glu			
740	745	750	
Ile Gln Val Trp Arg Ala Tyr Gly Asn Asp Ser Val Glu Arg Pro His			
755	760	765	
Gln Thr Asp Ser Trp Ile Gly Ser Ala Tyr Val Asp Leu Ala Arg Leu			
770	775	780	
Gly Glu Arg Ser Ala Arg Thr Leu Thr Val Ser Gly Val Tyr Pro Leu			
785	790	795	800
Phe Gly Arg Asn Ala Ser Asn Leu Ser Gly Ala Ala Leu Arg Val His			
805	810	815	
Val Val Leu Ser Ser Leu Ser Ser His Leu Glu Pro Thr His Glu Leu			
820	825	830	
Asp Ser Met Asp Cys Ser Ser His Ser Glu Ser Glu Gln Leu Pro Arg			
835	840	845	

Arg Asn Asp Glu Val Gln Leu Ser Pro Pro Glu Val Ile Ser Cys His  
 850 855 860  
 Gln Lys Ser Pro Ala Ser Thr Gln Val Pro Cys Ser Ser Thr Thr Ala  
 865 870 875 880  
 Glu Val Arg Leu Thr Arg Glu Gly Pro Ala Asp Leu Asp Gly Thr Phe  
 885 890 895  
 Ala Val Ser Ile Leu Val Glu Arg Ala Met His Leu Ser Leu Lys Gly  
 900 905 910  
 Ser Pro Leu Thr Glu Arg Lys Val Ser Ile Pro Ser Cys Cys Val Ser  
 915 920 925  
 Phe Ala Thr Ala Asp Glu Ser Ser Pro Val Tyr Thr Gln Val Val Glu  
 930 935 940  
 Asn Thr Asp Ser Pro Ile Trp Asn Phe Gln Gln Gln Ser Arg Leu Ser  
 945 950 955 960  
 Lys Glu Leu Leu Leu Asp Pro Gln Gln Thr Leu Val Phe Lys Val Trp  
 965 970 975  
 His Lys Gly Asp Glu Glu Arg Val Ile Gly Phe Ala Ser Val Asp Leu  
 980 985 990  
 Ser Pro Leu Leu Ser Gly Phe Gln Phe Val Cys Gly Trp Tyr Asn Ile  
 995 1000 1005  
 Thr Asp Phe Ser Gly Glu Cys Gln Gly Gln Ile Lys Val Ala Val Ser  
 1010 1015 1020  
 Pro Leu Glu Ser Leu Ile His Phe Lys Glu Glu Arg Gln Glu Arg Arg  
 1025 1030 1035 1040  
 Gly Val Glu Thr Ser Lys Ser Leu Ile Pro Ile Tyr Ser Pro Phe Ser  
 1045 1050 1055  
 Phe Pro Ala Ser Asp Thr Tyr Ala Ala Phe Ser Ser His Met Ala Arg  
 1060 1065 1070  
 Gln Thr Leu Asp Gln Leu Ala His Ala Ser Ser Lys Glu Leu Asp Phe  
 1075 1080 1085  
 Ser Ser Pro Gly Arg Ser Asp Thr Thr Arg Ser Gln Ala Ser Arg His  
 1090 1095 1100  
 Glu Glu His Val Gln Asn Ile Arg Arg Phe His Glu Ser Leu His Leu  
 1105 1110 1115 1120  
 Gln Gly Glu Ala Pro Leu Pro Cys Asp Asp Lys Leu Thr Thr Ser Pro  
 1125 1130 1135

Leu Ser Ser Gln Thr Ser Ile Leu Thr Ser Leu Arg Lys Asn Leu Ser		
1140	1145	1150
Glu Leu Asp Gln Ile Gln Arg Tyr Phe Arg Gln Lys Leu Thr Lys Pro		
1155	1160	1165
Phe Leu Pro Leu Ser Pro Gln Thr Gln Thr Ala Ile Ser Gln His Gln		
1170	1175	1180
Glu Ser Cys Arg Asp His Leu Gly Pro Gly Ala Ser Ser Leu Asp Pro		
1185	1190	1195
Gly Ser Gln Cys Ile Leu Glu Lys Ser Ser Asn Leu Val Leu Gln Val		
1205	1210	1215
Ser Ser Leu Ile Thr Gly Ser Tyr		
1220		

&lt;210&gt; 3786

&lt;211&gt; 186

&lt;212&gt; PRT

〈213〉 Homo sapiens

&lt;400&gt; 3786

Met	Thr	Glu	Met	Ala	Arg	Cys	Gln	Trp	Gln	Val	Pro	Pro	His	Gly	Leu
1				5					10					15	
Ala	Gln	Pro	Pro	Val	Cys	Ser	Gln	Gln	Gly	Gln	Thr	Thr	Arg	Trp	Gly
				20					25					30	
Tyr	Ser	Ile	Leu	His	Leu	Leu	Leu	Cys	Arg	Ala	Pro	Gln	Gly	Thr	Asn
				35				40					45		
Asn	Ser	Ser	Gln	Val	Trp	Pro	Phe	Pro	Thr	Leu	Ser	Pro	Gln	Leu	Val
				50				55				60			
Ser	Ser	Ala	Tyr	Lys	Glu	Thr	Val	Thr	Ser	Ser	Ile	Phe	Trp	Lys	Gly
				65				70				75			80
Ser	Glu	Thr	Gly	Leu	Leu	Ser	Phe	Arg	Val	Ala	Thr	Arg	Phe	Ser	Ile
				85					90					95	
Leu	Gln	Thr	Leu	Gly	Thr	Thr	Ser	His	Leu	Pro	Leu	Thr	Gly	Pro	Gly
				100					105					110	
Leu	Ser	Lys	Val	Ser	Gly	Ala	Gln	Asp	Val	Thr	Arg	Ala	Thr	Ser	Thr
				115				120					125		

Pro Ser Arg Thr Phe Asp Val Ser Val Asp Leu Ala Phe Gly Val Gln  
 130 135 140  
 Ile Ile Gln Ala Leu Gln Asn Leu Pro Gln Asp Arg Gly Asn Val Cys  
 145 150 155 160  
 Leu Leu Gln Gly Thr Trp Phe Lys Leu Glu Arg Lys Val Arg Gln Gln  
 165 170 175  
 Gly Leu Ser Ser Cys Pro Arg Pro Asn Ala  
 180 185

<210> 3787

<211> 773

<212> PRT

<213> Homo sapiens

<400> 3787

Met Glu Glu Glu Leu Asp Lys Met Glu Arg Glu Ala Cys Cys Phe Gly  
 1 5 10 15  
 Ser Glu Asp Glu Ser Ser Ser Lys Ala Glu Thr Glu Tyr Ser Phe Asp  
 20 25 30  
 Asp Trp Asp Trp Gln Asn Gly Ser Leu Ser Ser Leu Ser Leu Pro Glu  
 35 40 45  
 Ser Thr Arg Glu Ala Lys Ser Asn Leu Asn Asn Met Ser Thr Thr Glu  
 50 55 60  
 Glu Tyr Leu Ile Ser Lys Cys Val Leu Asp Leu Lys Ile Met Gln Thr  
 65 70 75 80  
 Ile Met His Glu Asn Asp Asp Arg Leu Arg Asn Ile Glu Gln Ile Leu  
 85 90 95  
 Asp Glu Val Glu Met Lys Gln Lys Glu Gln Glu Glu Arg Met Ser Leu  
 100 105 110  
 Trp Ala Thr Ser Arg Glu Phe Thr Asn Ala Tyr Lys Leu Pro Leu Ala  
 115 120 125  
 Val Gly Pro Pro Ser Leu Asn Tyr Ile Pro Pro Val Leu Gln Leu Ser  
 130 135 140  
 Gly Gly Gln Lys Pro Asp Thr Ser Gly Asn Tyr Pro Thr Leu Pro Arg  
 145 150 155 160

Phe Pro Arg Met Leu Pro Thr Leu Cys Asp Pro Gly Lys Gln Asn Thr  
 165 170 175  
 Asp Glu Gln Phe Gln Cys Thr Gln Gly Ala Lys Asp Ser Leu Glu Thr  
 180 185 190  
 Ser Arg Ile Gln Asn Thr Ser Ser Gln Gly Arg Pro Arg Glu Ser Thr  
 195 200 205  
 Ala Gln Ala Lys Ala Thr Gln Phe Asn Ser Ala Leu Phe Thr Leu Ser  
 210 215 220  
 Ser His Arg Gln Gly Pro Ser Ala Ser Pro Ser Cys His Trp Asp Ser  
 225 230 235 240  
 Thr Arg Met Ser Val Glu Pro Val Ser Ser Glu Ile Tyr Asn Ala Glu  
 245 250 255  
 Ser Arg Asn Lys Asp Asp Gly Lys Val His Leu Lys Trp Lys Met Glu  
 260 265 270  
 Val Lys Glu Met Ala Lys Lys Ala Ala Thr Gly Gln Leu Thr Val Pro  
 275 280 285  
 Pro Trp His Pro Gln Ser Ser Leu Thr Leu Glu Ser Glu Ala Glu Asn  
 290 295 300  
 Glu Pro Asp Ala Leu Leu Gln Pro Pro Ile Arg Ser Pro Glu Asn Thr  
 305 310 315 320  
 Asp Trp Gln Arg Val Ile Glu Tyr His Arg Glu Asn Asp Glu Pro Arg  
 325 330 335  
 Gly Asn Gly Lys Phe Asp Lys Thr Gly Asn Asn Asp Cys Asp Ser Asp  
 340 345 350  
 Gln His Gly Arg Gln Pro Arg Leu Gly Ser Phe Thr Ser Ile Arg His  
 355 360 365  
 Pro Ser Pro Arg Gln Lys Glu Gln Pro Glu His Ser Glu Ala Phe Gln  
 370 375 380  
 Ala Ser Ser Asp Thr Leu Val Ala Val Glu Lys Ser Tyr Ser His Gln  
 385 390 395 400  
 Ser Met Gln Ser Thr Cys Ser Pro Glu Ser Ser Glu Asp Ile Thr Asp  
 405 410 415  
 Glu Phe Leu Thr Pro Asp Asp Glu Tyr Phe Tyr Ser Ser Thr Ala Gln  
 420 425 430  
 Glu Asn Leu Ala Leu Glu Thr Ser Ser Pro Ile Glu Glu Asp Phe Glu  
 435 440 445

Gly Ile Gln Gly Ala Phe Ala Gln Pro Gln Val Ser Gly Glu Glu Lys  
 450 455 460  
 Phe Gln Met Arg Lys Ile Leu Gly Lys Asn Ala Glu Ile Leu Pro Arg  
 465 470 475 480  
 Ser Gln Phe Gln Pro Val Arg Ser Thr Glu Asp Glu Gln Glu Glu Thr  
 485 490 495  
 Ser Lys Glu Ser Pro Lys Glu Leu Lys Glu Lys Asp Ile Ser Leu Thr  
 500 505 510  
 Asp Ile Gln Asp Leu Ser Ser Ile Ser Tyr Glu Pro Asp Ser Ser Phe  
 515 520 525  
 Lys Glu Ala Ser Cys Lys Thr Pro Lys Ile Asn His Ala Pro Thr Ser  
 530 535 540  
 Val Ser Thr Pro Leu Ser Pro Gly Ser Val Ser Ser Ala Ala Ser Gln  
 545 550 555 560  
 Tyr Lys Asp Cys Leu Glu Ser Ile Thr Phe Gln Val Lys Thr Glu Phe  
 565 570 575  
 Ala Ser Cys Trp Asn Ser Gln Glu Phe Ile Gln Thr Leu Ser Asp Asp  
 580 585 590  
 Phe Ile Ser Val Arg Glu Arg Ala Lys Lys Leu Asp Ser Leu Leu Thr  
 595 600 605  
 Ser Ser Glu Thr Pro Pro Ser Arg Leu Thr Gly Leu Lys Arg Leu Ser  
 610 615 620  
 Ser Phe Ile Gly Ala Gly Ser Pro Ser Leu Val Lys Ala Cys Asp Ser  
 625 630 635 640  
 Ser Pro Pro His Ala Thr Gln Arg Arg Ser Leu Pro Lys Val Glu Ala  
 645 650 655  
 Phe Ser Gln His His Ile Asp Glu Leu Pro Pro Pro Ser Gln Glu Leu  
 660 665 670  
 Leu Asp Asp Ile Glu Leu Leu Lys Gln Gln Gln Gly Ser Ser Thr Val  
 675 680 685  
 Leu His Glu Asn Thr Ala Ser Asp Gly Gly Gly Thr Ala Asn Asp Gln  
 690 695 700  
 Arg His Leu Glu Glu Gln Glu Thr Asp Ser Lys Lys Glu Asp Ser Ser  
 705 710 715 720  
 Met Leu Leu Ser Lys Glu Thr Glu Asp Leu Gly Glu Asp Thr Glu Arg  
 725 730 735

Ala His Ser Thr Leu Asp Glu Asp Leu Glu Arg Trp Leu Gln Pro Pro  
                   740                  745                  750  
 Glu Glu Ser Val Glu Leu Gln Asp Leu Pro Lys Gly Ser Glu Arg Glu  
                   755                  760                  765  
 Thr Asn Ile Lys Asp  
                   770

<210> 3788

<211> 969

<212> PRT

<213> Homo sapiens

<400> 3788

Met Val Lys Leu Val Leu Leu Ser Ile Val Leu Leu Lys Val Thr Val  
   1                  5                  10                  15  
 Pro Lys Leu Ser Asn Tyr Leu Leu Gln Leu Asp Phe Met Pro Ile His  
                   20                  25                  30  
 Arg Gly Ile Leu Ala Ile Ala Trp Ser Met Ala Asp Pro Glu Leu Leu  
                   35                  40                  45  
 Leu Ser Cys Gly Lys Asp Ala Arg Ile Leu Cys Ser Asn Pro Asn Thr  
                   50                  55                  60  
 Gly Glu Val Leu Tyr Glu Leu Pro Thr Asn Thr Gln Trp Cys Phe Asp  
   65                  70                  75                  80  
 Ile Gln Trp Cys Pro Arg Asn Pro Ala Val Leu Ser Ala Ala Ser Phe  
                   85                  90                  95  
 Asp Gly Arg Ile Ser Val Tyr Ser Ile Met Gly Gly Ser Thr Asp Gly  
                   100                  105                  110  
 Leu Arg Gln Lys Gln Val Asp Lys Leu Ser Ser Ser Phe Gly Asn Leu  
                   115                  120                  125  
 Asp Pro Phe Gly Thr Gly Gln Pro Leu Pro Pro Leu Gln Ile Pro Gln  
                   130                  135                  140  
 Gln Thr Ala Gln His Ser Ile Val Leu Pro Leu Lys Lys Pro Pro Lys  
   145                  150                  155                  160  
 Trp Ile Arg Arg Pro Val Gly Ala Ser Phe Ser Phe Gly Gly Lys Leu  
                   165                  170                  175

Val Thr Phe Glu Asn Val Arg Met Pro Ser His Gln Gly Ala Glu Gln  
 180 185 190  
 Gln Gln Gln Gln His His Val Phe Ile Ser Gln Val Val Thr Glu Lys  
 195 200 205  
 Glu Phe Leu Ser Arg Ser Asp Gln Leu Gln Gln Ala Val Gln Ser Gln  
 210 215 220  
 Gly Phe Ile Asn Tyr Cys Gln Lys Lys Ile Asp Ala Ser Gln Thr Glu  
 225 230 235 240  
 Phe Glu Lys Asn Val Trp Ser Phe Leu Lys Val Asn Phe Glu Asp Asp  
 245 250 255  
 Ser Arg Gly Lys Tyr Leu Glu Leu Leu Gly Tyr Arg Lys Glu Asp Leu  
 260 265 270  
 Gly Lys Lys His Ile Lys Glu Glu Lys Glu Glu Ser Glu Phe Leu Pro  
 275 280 285  
 Ser Ser Gly Gly Thr Phe Asn Ile Ser Val Ser Gly Asp Ile Asp Gly  
 290 295 300  
 Leu Ile Thr Gln Ala Leu Leu Thr Gly Asn Phe Glu Ser Ala Val Asp  
 305 310 315 320  
 Leu Cys Leu His Asp Asn Arg Met Ala Asp Ala Ile Ile Leu Ala Ile  
 325 330 335  
 Ala Gly Gly Gln Glu Leu Leu Ala Arg Thr Gln Lys Lys Tyr Phe Ala  
 340 345 350  
 Lys Ser Gln Ser Lys Ile Thr Arg Leu Ile Thr Ala Val Val Met Lys  
 355 360 365  
 Asn Trp Lys Glu Ile Val Glu Ser Cys Asp Leu Lys Asn Trp Arg Glu  
 370 375 380  
 Ala Leu Ala Ala Val Leu Thr Tyr Ala Lys Pro Asp Glu Phe Ser Ala  
 385 390 395 400  
 Leu Cys Asp Leu Leu Gly Thr Arg Leu Glu Asn Glu Gly Asp Ser Leu  
 405 410 415  
 Leu Gln Thr Gln Ala Cys Leu Cys Tyr Ile Cys Ala Gly Asn Val Glu  
 420 425 430  
 Lys Leu Val Ala Cys Trp Thr Lys Ala Gln Asp Gly Ser His Pro Leu  
 435 440 445  
 Ser Leu Gln Asp Leu Ile Glu Lys Val Val Ile Leu Arg Lys Ala Val  
 450 455 460



Gln Leu Thr Gln Ala Met Asp Thr Ser Thr Val Gly Val Leu Leu Ala  
 465 470 475 480  
 Ala Lys Met Ser Gln Tyr Ala Asn Leu Leu Ala Ala Gln Gly Ser Ile  
 485 490 495  
 Ala Ala Ala Leu Ala Phe Leu Pro Asp Asn Thr Asn Gln Pro Asn Ile  
 500 505 510  
 Met Gln Leu Arg Asp Arg Leu Cys Arg Ala Gln Gly Glu Pro Val Ala  
 515 520 525  
 Gly His Glu Ser Pro Lys Ile Pro Tyr Glu Lys Gln Gln Leu Pro Lys  
 530 535 540  
 Gly Arg Pro Gly Pro Val Ala Gly His His Gln Met Pro Arg Val Gln  
 545 550 555 560  
 Thr Gln Gln Tyr Tyr Pro His Val Arg Ile Ala Pro Thr Val Thr Thr  
 565 570 575  
 Trp Ser Asn Lys Thr Pro Thr Ala Leu Pro Ser His Pro Pro Ala Ala  
 580 585 590  
 Ser Pro Ser Asp Thr Gln Gly Glu Asn Pro Pro Pro Pro Gly Phe Ile  
 595 600 605  
 Met His Gly Asn Val Asn Pro Asn Ala Ala Gly Gln Leu Pro Thr Ser  
 610 615 620  
 Pro Gly His Met His Thr Gln Val Pro Pro Tyr Pro Gln Pro Gln Pro  
 625 630 635 640  
 Tyr Gln Pro Ala Gln Pro Tyr Pro Phe Gly Thr Gly Gly Ser Ala Met  
 645 650 655  
 Tyr Arg Pro Gln Gln Pro Val Ala Pro Pro Thr Ser Asn Ala Tyr Pro  
 660 665 670  
 Asn Thr Pro Tyr Ile Ser Ser Ala Ser Ser Tyr Thr Gly Gln Ser Gln  
 675 680 685  
 Leu Tyr Ala Ala Gln His Gln Ala Ser Ser Pro Thr Ser Ser Pro Ala  
 690 695 700  
 Thr Ser Phe Pro Pro Pro Pro Ser Ser Gly Ala Ser Phe Gln His Gly  
 705 710 715 720  
 Gly Pro Gly Ala Pro Pro Ser Ser Ser Ala Tyr Ala Leu Pro Pro Gly  
 725 730 735  
 Thr Thr Gly Pro Gln Asn Gly Trp Asn Asp Pro Pro Ala Leu Asn Arg  
 740 745 750

Val Pro Lys Lys Lys Lys Met Pro Glu Asn Phe Met Pro Pro Val Pro  
 755 760 765  
 Ile Thr Ser Pro Ile Met Asn Pro Leu Gly Asp Pro Gln Ser Gln Met  
 770 775 780  
 Leu Gln Gln Gln Pro Ser Ala Pro Val Pro Leu Ser Ser Gln Ser Ser  
 785 790 795 800  
 Phe Pro Gln Pro His Leu Pro Gly Gly Gln Pro Phe His Gly Val Gln  
 805 810 815  
 Gln Pro Leu Gly Gln Thr Gly Met Pro Pro Ser Phe Ser Lys Pro Asn  
 820 825 830  
 Ile Glu Gly Ala Pro Gly Ala Pro Ile Gly Asn Thr Phe Gln His Val  
 835 840 845  
 Gln Ser Leu Pro Thr Lys Lys Ile Thr Lys Lys Pro Ile Pro Asp Glu  
 850 855 860  
 His Leu Ile Leu Lys Thr Thr Phe Glu Asp Leu Ile Gln Arg Cys Leu  
 865 870 875 880  
 Ser Ser Ala Thr Asp Pro Gln Thr Lys Arg Lys Leu Asp Asp Ala Ser  
 885 890 895  
 Lys Arg Leu Glu Phe Leu Tyr Asp Lys Leu Arg Glu Gln Thr Leu Ser  
 900 905 910  
 Pro Thr Ile Thr Ser Gly Leu His Asn Ile Ala Arg Ser Ile Glu Thr  
 915 920 925  
 Arg Asn Tyr Ser Glu Gly Leu Thr Met His Thr His Ile Val Ser Thr  
 930 935 940  
 Ser Asn Phe Ser Glu Thr Ser Ala Phe Met Pro Val Leu Lys Val Val  
 945 950 955 960  
 Leu Thr Gln Ala Asn Lys Leu Gly Val  
 965

<210> 3789

<211> 1488

<212> PRT

<213> Homo sapiens

<400> 3789

Met Val Lys Gly Ser Val Glu Asn Tyr Arg Leu Ile His Asn Trp Val  
 1 5 10 15  
 Met Ala Gln His Met Gln Ser His Ala Pro Tyr Lys Trp Asp Tyr Trp  
 20 25 30  
 Pro His Glu Asp Val Arg Ala Glu Cys Arg Phe Val Gly Leu Thr Asn  
 35 40 45  
 Leu Gly Ala Thr Cys Tyr Leu Ala Ser Thr Ile Gln Gln Leu Tyr Met  
 50 55 60  
 Ile Pro Glu Ala Arg Gln Ala Val Phe Thr Ala Lys Tyr Ser Glu Asp  
 65 70 75 80  
 Met Lys His Lys Thr Thr Leu Leu Glu Leu Gln Lys Met Phe Thr Tyr  
 85 90 95  
 Leu Met Glu Ser Glu Cys Lys Ala Tyr Asn Pro Arg Pro Phe Cys Lys  
 100 105 110  
 Thr Tyr Thr Met Asp Lys Gln Pro Leu Asn Thr Gly Glu Gln Lys Asp  
 115 120 125  
 Met Thr Glu Phe Phe Thr Asp Leu Ile Thr Lys Ile Glu Glu Met Ser  
 130 135 140  
 Pro Glu Leu Lys Asn Thr Val Lys Ser Leu Phe Gly Gly Val Ile Thr  
 145 150 155 160  
 Asn Asn Val Val Ser Leu Asp Cys Glu His Val Ser Gln Thr Ala Glu  
 165 170 175  
 Glu Phe Tyr Thr Val Arg Cys Gln Val Ala Asp Met Lys Asn Ile Tyr  
 180 185 190  
 Glu Ser Leu Asp Glu Val Thr Ile Lys Asp Thr Leu Glu Gly Asp Asn  
 195 200 205  
 Met Tyr Thr Cys Ser His Cys Gly Lys Lys Val Arg Ala Glu Lys Arg  
 210 215 220  
 Ala Cys Phe Lys Lys Leu Pro Arg Ile Leu Ser Phe Asn Thr Met Arg  
 225 230 235 240  
 Tyr Thr Phe Asn Met Val Thr Met Met Lys Glu Lys Val Asn Thr His  
 245 250 255  
 Phe Ser Phe Pro Leu Arg Leu Asp Met Thr Pro Tyr Thr Glu Asp Phe  
 260 265 270  
 Leu Met Gly Lys Ser Glu Arg Lys Glu Gly Phe Lys Glu Val Ser Asp  
 275 280 285

His Ser Lys Asp Ser Glu Ser Tyr Glu Tyr Asp Leu Ile Gly Val Thr  
 290 295 300  
 Val His Thr Gly Thr Ala Asp Gly Gly His Tyr Tyr Ser Phe Ile Arg  
 305 310 315 320  
 Asp Ile Val Asn Pro His Ala Tyr Lys Asn Asn Lys Trp Tyr Leu Phe  
 325 330 335  
 Asn Asp Ala Glu Val Lys Pro Phe Asp Ser Ala Gln Leu Ala Ser Glu  
 340 345 350  
 Cys Phe Gly Gly Glu Met Thr Thr Lys Thr Tyr Asp Ser Val Thr Asp  
 355 360 365  
 Lys Phe Met Asp Phe Ser Phe Glu Lys Thr His Ser Ala Tyr Met Leu  
 370 375 380  
 Phe Tyr Lys Arg Met Glu Pro Glu Glu Glu Asn Gly Arg Glu Tyr Lys  
 385 390 395 400  
 Phe Asp Val Ser Ser Glu Leu Leu Glu Trp Ile Trp His Asp Asn Met  
 405 410 415  
 Gln Phe Leu Gln Asp Lys Asn Ile Phe Glu His Thr Tyr Phe Gly Phe  
 420 425 430  
 Met Trp Gln Leu Cys Ser Cys Ile Pro Ser Thr Leu Pro Asp Pro Lys  
 435 440 445  
 Ala Val Ser Leu Met Thr Ala Lys Leu Ser Thr Ser Phe Val Leu Glu  
 450 455 460  
 Thr Phe Ile His Ser Lys Glu Lys Pro Thr Met Leu Gln Trp Ile Glu  
 465 470 475 480  
 Leu Leu Thr Lys Gln Phe Asn Asn Ser Gln Ala Ala Cys Glu Trp Phe  
 485 490 495  
 Leu Asp Arg Met Ala Asp Asp Asp Trp Trp Pro Met Gln Ile Leu Ile  
 500 505 510  
 Lys Cys Pro Asn Gln Ile Val Arg Gln Met Phe Gln Arg Leu Cys Ile  
 515 520 525  
 His Val Ile Gln Arg Leu Arg Pro Val His Ala His Leu Tyr Leu Gln  
 530 535 540  
 Pro Gly Met Glu Asp Gly Ser Asp Asp Met Asp Thr Ser Val Glu Asp  
 545 550 555 560  
 Ile Gly Gly Arg Ser Cys Val Thr Arg Phe Val Arg Thr Leu Leu Leu  
 565 570 575

Ile Met Glu His Gly Val Lys Pro His Ser Lys His Leu Thr Glu Tyr			
580	585	590	
Phe Ala Phe Leu Tyr Glu Phe Ala Lys Met Gly Glu Glu Glu Ser Gln			
595	600	605	
Phe Leu Leu Ser Leu Gln Ala Ile Ser Thr Met Val His Phe Tyr Met			
610	615	620	
Gly Thr Lys Gly Pro Glu Asn Pro Gln Val Glu Val Leu Ser Glu Glu			
625	630	635	640
Glu Gly Glu Glu Glu Glu Glu Glu Asp Ile Leu Ser Leu Ala Glu			
645	650	655	
Glu Lys Tyr Arg Pro Ala Ala Leu Glu Lys Met Ile Ala Leu Val Ala			
660	665	670	
Leu Leu Val Glu Gln Ser Arg Ser Glu Arg His Leu Thr Leu Ser Gln			
675	680	685	
Thr Asp Met Ala Ala Leu Thr Gly Gly Lys Gly Phe Pro Phe Leu Phe			
690	695	700	
Gln His Ile Arg Asp Gly Ile Asn Ile Arg Gln Thr Cys Asn Leu Ile			
705	710	715	720
Phe Ser Leu Cys Arg Tyr Asn Asn Arg Leu Ala Glu His Ile Val Ser			
725	730	735	
Met Leu Phe Thr Ser Ile Ala Lys Leu Thr Pro Glu Ala Ala Asn Pro			
740	745	750	
Phe Phe Lys Leu Leu Thr Met Leu Met Glu Phe Ala Gly Gly Pro Pro			
755	760	765	
Gly Met Pro Pro Phe Ala Ser Tyr Ile Leu Gln Arg Ile Trp Glu Val			
770	775	780	
Ile Glu Tyr Asn Pro Ser Gln Cys Leu Asp Trp Leu Ala Val Gln Thr			
785	790	795	800
Pro Arg Asn Lys Leu Ala His Ser Trp Val Leu Gln Asn Met Glu Asn			
805	810	815	
Trp Val Glu Arg Phe Leu Leu Ala His Asn Tyr Pro Arg Val Arg Thr			
820	825	830	
Ser Ala Ala Tyr Leu Leu Val Ser Leu Ile Pro Ser Asn Ser Phe Arg			
835	840	845	
Gln Met Phe Arg Ser Thr Arg Ser Leu His Ile Pro Thr Arg Asp Leu			

850	855	860	
Pro Leu Ser Pro Asp Thr Thr Val Val Leu His Gln Val Tyr Asn Val			
865	870	875	880
Leu Leu Gly Leu Leu Ser Arg Ala Lys Leu Tyr Val Asp Ala Ala Val			
	885	890	895
His Gly Thr Thr Lys Leu Val Pro Tyr Phe Ser Phe Met Thr Tyr Cys			
	900	905	910
Leu Ile Ser Lys Thr Glu Lys Leu Met Phe Ser Thr Tyr Phe Met Asp			
	915	920	925
Leu Trp Asn Leu Phe Gln Pro Lys Leu Ser Glu Pro Ala Ile Ala Thr			
	930	935	940
Asn His Asn Lys Gln Ala Leu Leu Ser Phe Trp Tyr Asn Val Cys Ala			
945	950	955	960
Asp Cys Pro Glu Asn Ile Arg Leu Ile Val Gln Asn Pro Val Val Thr			
	965	970	975
Lys Asn Ile Ala Phe Asn Tyr Ile Leu Ala Asp His Asp Asp Gln Asp			
	980	985	990
Val Val Leu Phe Asn Arg Gly Met Leu Pro Ala Tyr Tyr Gly Ile Leu			
	995	1000	1005
Arg Leu Cys Cys Glu Gln Ser Pro Ala Phe Thr Arg Gln Leu Ala Ser			
	1010	1015	1020
His Gln Asn Ile Gln Trp Ala Phe Lys Asn Leu Thr Pro His Ala Ser			
1025	1030	1035	1040
Gln Tyr Pro Gly Ala Val Glu Glu Leu Phe Asn Leu Met Gln Leu Phe			
	1045	1050	1055
Ile Ala Gln Arg Pro Asp Met Arg Glu Glu Glu Leu Glu Asp Ile Lys			
	1060	1065	1070
Gln Phe Lys Lys Thr Thr Ile Ser Cys Tyr Leu Arg Cys Leu Asp Gly			
	1075	1080	1085
Arg Ser Cys Trp Thr Thr Leu Ile Ser Ala Phe Arg Ile Leu Leu Glu			
	1090	1095	1100
Ser Asp Glu Asp Arg Leu Leu Val Val Phe Asn Arg Gly Leu Ile Leu			
1105	1110	1115	1120
Met Thr Glu Ser Phe Asn Thr Leu His Met Met Tyr His Glu Ala Thr			
	1125	1130	1135
Ala Cys His Val Thr Gly Asp Leu Val Glu Leu Leu Ser Ile Phe Leu			

1140	1145	1150	
Ser Val Leu Lys Ser Thr Arg Pro Tyr Leu Gln Arg Lys Asp Val Lys			
1155	1160	1165	
Gln Ala Leu Ile Gln Trp Gln Glu Arg Ile Glu Phe Ala His Lys Leu			
1170	1175	1180	
Leu Thr Leu Leu Asn Ser Tyr Ser Pro Pro Glu Leu Arg Asn Ala Cys			
1185	1190	1195	1200
Ile Asp Val Leu Lys Glu Leu Val Leu Leu Ser Pro His Asp Phe Leu			
1205	1210	1215	
His Thr Leu Val Pro Phe Leu Gln His Asn His Cys Thr Tyr His His			
1220	1225	1230	
Ser Asn Ile Pro Met Ser Leu Gly Pro Tyr Phe Pro Cys Arg Glu Asn			
1235	1240	1245	
Ile Lys Leu Ile Gly Gly Lys Ser Asn Ile Arg Pro Pro Arg Pro Glu			
1250	1255	1260	
Leu Asn Met Cys Leu Leu Pro Thr Met Val Glu Thr Ser Lys Gly Lys			
1265	1270	1275	1280
Asp Asp Val Tyr Asp Arg Met Leu Leu Asp Tyr Phe Phe Ser Tyr His			
1285	1290	1295	
Gln Phe Ile His Leu Leu Cys Arg Val Ala Ile Asn Cys Glu Lys Phe			
1300	1305	1310	
Thr Glu Thr Leu Val Lys Leu Ser Val Leu Val Ala Tyr Glu Gly Leu			
1315	1320	1325	
Pro Leu His Leu Ala Leu Phe Pro Lys Leu Trp Thr Glu Leu Cys Gln			
1330	1335	1340	
Thr Gln Ser Ala Met Ser Lys Asn Cys Ile Lys Leu Leu Cys Glu Asp			
1345	1350	1355	1360
Pro Val Phe Ala Glu Tyr Ile Lys Cys Ile Leu Met Asp Glu Arg Thr			
1365	1370	1375	
Phe Leu Asn Asn Asn Ile Val Tyr Thr Phe Met Thr His Phe Leu Leu			
1380	1385	1390	
Lys Val Gln Ser Gln Val Phe Ser Glu Ala Asn Cys Ala Asn Leu Ile			
1395	1400	1405	
Ser Thr Leu Ile Thr Asn Leu Ile Ser Gln Tyr Gln Asn Leu Gln Ser			
1410	1415	1420	
Asp Phe Ser Asn Arg Val Glu Ile Ser Lys Ala Ser Ala Ser Leu Asn			

1425                      1430                      1435                      1440  
 Gly Asp Leu Arg Ala Leu Ala Leu Leu Leu Ser Val His Thr Pro Lys  
                             1445                      1450                      1455  
 Gln Leu Asn Pro Ala Leu Ile Pro Thr Leu Gln Glu Leu Leu Ser Lys  
                             1460                      1465                      1470  
 Cys Arg Thr Cys Leu Gln Gln Arg Asn Ser Leu Gln Glu Gln Glu Ala  
                             1475                      1480                      1485

<210> 3790

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3790

Met Asn Glu Phe Phe Ser Val Asp Asp Asn Asn Glu Glu Glu Glu Asp  
   1                            5                            10                            15  
 Val Glu Met Lys Glu Asp Ser Asp Glu Asn Gly Pro Glu Glu Lys Gln  
                             20                            25                            30  
 Ser Val Glu Glu Met Glu Glu Gln Ser Gln Asp Ala Asp Gly Val Asn  
                             35                            40                            45  
 Thr Val Thr Val Pro Gly Pro Ala Ser Glu Glu Ala Val Glu Asp Cys  
                             50                            55                            60  
 Lys Asp Glu Asp Phe Ala Lys Asp Glu Asn Ile Thr Lys Gly Gly Glu  
   65                            70                            75                            80  
 Val Thr Asp His Ser Val Arg Asp Gln Asp His Pro Asp Gly Gln Glu  
                             85                            90                            95  
 Asn Asp Ser Thr Lys Asn Glu Ile Lys Ile Glu Thr Glu Ser Gln Ser  
                             100                            105                            110  
 Ser Tyr Met Glu Thr Glu Glu Leu Ser Ser Asn Gln Glu Asp Ala Val  
                             115                            120                            125  
 Ile Val Glu Gln Pro Glu Val Ile Pro Leu Thr Glu Asp Gln Glu Glu  
                             130                            135                            140  
 Lys Glu Gly Glu Lys Ala Pro Gly Glu Asp Thr Pro Arg Met Pro Gly  
   145                            150                            155                            160  
 Lys Ser Glu Gly Ser Ser Asp Leu Glu Asn Thr Pro Gly Pro Asp Ala



165                      170                      175  
 Gly Ala Gln Asp Glu Ala Lys Glu Gln Arg Asn Gly Thr Lys  
 180                      185                      190

<210> 3791

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3791

Met Gly Phe Leu Pro Asp Tyr Phe Leu Val Phe Ser Leu Thr Glu Cys  
 1                      5                      10                      15  
 His Lys Gly Leu Gly Leu Trp Phe Pro Thr Gly Lys Glu Thr Ser Asn  
 20                      25                      30  
  
 Phe Ala Ser Leu Ser Ser Phe Tyr Met Thr Met Gly Gly Ser Cys Ser  
 35                      40                      45  
 Tyr Gly Ser Ile Ser Phe Pro Pro Lys Ala Tyr Glu Thr Gly Cys Asn  
 50                      55                      60  
 Leu Asn Pro Tyr Phe Ile Lys Gly Glu Glu Met Ser Lys Ser Pro Glu  
 65                      70                      75                      80  
 Ile Val Gly Lys Ser Ile Ile Arg Thr Arg Asn Gly Val Phe Leu Leu  
 85                      90                      95  
 Leu Ile Ser Arg Gly Glu Gly  
 100

<210> 3792

<211> 564

<212> PRT

<213> Homo sapiens

<400> 3792

Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met Val Arg Thr Phe  
 1                      5                      10                      15

5